Radio Test Report

Report No.:STS2410099W02

Issued for

Shenzhen Xtooltech Intelligent Co., Ltd.

17&18/F, A2 Building, Creative City, Liuxian Avenue, Nanshan District, Shenzhen, China

| Product Name: | Wireless Diagnostics Module, Vehicle Communication Interface |
|------------------|---|
| Brand Name: | XTOOL, AutoProPAD |
| Model Name: | V209 |
| Series Model(s): | N/A |
| FCC ID: | 2AW3IV209 |
| Test Standards: | FCC Part15.247 |

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.



Report No.: STS2410099W02

TEST REPORT

| Applicant's Name: | Shenzhen Xtooltech Intelligent Co., Ltd. |
|----------------------|--|
| Address: | 17&18/F, A2 Building, Creative City, Liuxian Avenue, Nanshan District, Shenzhen, China |
| Manufacturer's Name: | Shenzhen Xtooltech Intelligent Co., Ltd. |
| Address: | 17&18/F, A2 Building, Creative City, Liuxian Avenue, Nanshan District, Shenzhen, China |

Product Description

| Product Name: | Wireless Diagnostics Module, Vehicle Communication Interface |
|------------------|--|
| Brand Name: | XTOOL, AutoProPAD |
| Model Name | . V209 |
| Series Model(s): | N/A |
| Test Standards | FCC Part 15.247 |
| Test Procedure | ANSI C63.10-2020 |

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

| Date of Test | |
|-----------------------------------|---------------------------|
| Date of receipt of test item: | 28 Oct. 2024 |
| Date (s) of performance of tests: | 28 Oct. 2024~31 Oct. 2024 |
| Date of Issue | 31 Oct. 2024 |
| Test Result | Pass |

Testing Engineer

Aann 13u

(Aaron Bu)

Technical Manager

Authorized Signatory :

:

(Tony Liu)



61

(Bovey Yang)



| | Table of Contents | Page |
|----|--|----------|
| | | |
| 1. | SUMMARY OF TEST RESULTS | 6 |
| | 1.1 TEST FACTORY | 7 |
| | 1.2 MEASUREMENT UNCERTAINTY | 7 |
| 2. | GENERAL INFORMATION | 8 |
| | 2.1 GENERAL DESCRIPTION OF THE EUT | 8 |
| | 2.2 DESCRIPTION OF THE TEST MODES | 10 |
| | 2.3 TEST SOFTWARE AND POWER LEVEL | 10 |
| | 2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED | |
| | 2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS | 12 |
| | 2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS | 13 |
| 3. | | 14 |
| | 3.1 CONDUCTED EMISSION MEASUREMENT | 14 |
| | 3.2 RADIATED EMISSION MEASUREMENT | 18 |
| 4. | CONDUCTED SPURIOUS & BAND EDGE EMISSION | 30 |
| | | 30 |
| | 4.2 TEST PROCEDURE 4.3 DEVIATION FROM STANDARD | 30 30 |
| | 4.3 DEVIATION FROM STANDARD 4.4 TEST SETUP | 30 |
| | 4.5 EUT OPERATION CONDITIONS | 30 |
| | 4.6 TEST RESULTS | 30 |
| 5. | POWER SPECTRAL DENSITY TEST | 31 |
| | 5.1 LIMIT | 31 |
| | 5.2 TEST PROCEDURE | 31 |
| | 5.3 DEVIATION FROM STANDARD | 31 |
| | 5.4 TEST SETUP | 31 |
| | 5.5 EUT OPERATION CONDITIONS | 31 |
| | 5.6 TEST RESULTS | 31 |
| 6. | BANDWIDTH TEST | 32 |
| | 6.1 LIMIT | 32 |
| | 6.2 TEST PROCEDURE | 32 |
| | 6.3 DEVIATION FROM STANDARD | 32 |
| | 6.4 TEST SETUP | 32 |
| | 6.5 EUT OPERATION CONDITIONS | 32 |



| Table of Contents | Page |
|---|------|
| | |
| 6.6 TEST RESULTS | 32 |
| 7. PEAK OUTPUT POWER TEST | 33 |
| 7.1 LIMIT | 33 |
| 7.2 TEST PROCEDURE | 33 |
| 7.3 DEVIATION FROM STANDARD | 33 |
| 7.4 TEST SETUP | 34 |
| 7.5 EUT OPERATION CONDITIONS | 34 |
| 7.6 TEST RESULTS | 34 |
| 8. ANTENNA REQUIREMENT | 35 |
| 8.1 STANDARD REQUIREMENT | 35 |
| 8.2 EUT ANTENNA | 35 |
| APPENDIX 1-TEST DATA | 36 |
| 1. DUTY CYCLE | 36 |
| 2. MAXIMUM AVERAGE CONDUCTED OUTPUT POWER | 42 |
| 3. MAXIMUM PEAK CONDUCTED OUTPUT POWER | 48 |
| 46DB BANDWIDTH | 49 |
| 5. MAXIMUM POWER SPECTRAL DENSITY LEVEL | 55 |
| 6. BAND EDGE | 61 |
| 7. CONDUCTED RF SPURIOUS EMISSION | 68 |
| APPENDIX 2-PHOTOS OF TEST SETUP | 78 |



Page 5 of 78

Report No.: STS2410099W02

Revision History

| Rev. | Issue Date | Report No. | Effect Page | Contents |
|------|--------------|---------------|-------------|---------------|
| 00 | 31 Oct. 2024 | STS2410099W02 | ALL | Initial Issue |
| * | | | 9 | 9 |





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 558074 D01 15.247 Meas Guidance v05r02.

| FCC Part 15.247,Subpart C | | | |
|-----------------------------------|--|----------|--------|
| Standard Section | Test Item | Judgment | Remark |
| 15.207 | Conducted Emission | PASS | |
| 15.247 (a)(2) | 6dB Bandwidth | PASS | |
| 15.247 (b)(3) | 15.247 (b)(3) Output Power | | |
| 15.209 | Radiated Spurious Emission | PASS | |
| 15.247 (d) | Conducted Spurious & Band Edge Emission | PASS | |
| 15.247 (e) | Power Spectral Density | PASS | |
| 15.205 | Restricted Band Edge Emission | PASS | |
| Part 15.247(d)/ part 15.209(a) | Band Edge Emission | PASS | |
| 15.203 | Antenna Requirement | PASS | |

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2020.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

Page 7 of 78

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y \pm U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

| No. | Item | Uncertainty |
|-----|-----------------------------------|-------------|
| 1 | RF output power, conducted | ±0.755dB |
| 2 | Unwanted Emissions, conducted | ±2.874dB |
| 3 | All emissions, radiated 9K-30MHz | ±3.80dB |
| 4 | All emissions, radiated 30M-1GHz | ±4.18dB |
| 5 | All emissions, radiated 1G-6GHz | ±4.90dB |
| 6 | All emissions, radiated>6G | ±5.24dB |
| 7 | Conducted Emission (9KHz-150KHz) | ±2.19dB |
| 8 | Conducted Emission (150KHz-30MHz) | ±2.53dB |
| 9 | Occupied Channel Bandwidth | ±3.5% |
| 10 | Power Spectral Density, conducted | ±1.245dB |
| 11 | Duty Cycle | ±3.2% |



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

| Product Name | Wireless Diagnosti | cs Module, Vehicle Communication Interface | | |
|-------------------------|--|--|--|--|
| Brand Name | XTOOL, AutoProPA | AD | | |
| Model Name | V209 | | | |
| Series Model(s) | N/A | | | |
| Model Difference | N/A | | | |
| Product Description | Interface Operation Frequency: Modulation Type: Bit Rate of Transmitter: Number of Channel: Antenna Type: Antenna Gain: | ess Diagnostics Module, Vehicle Communication 802.11b/g/n 20: 2412~2462 MHz 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20MHz): 65/58.5/52/39/26/19.5/13/6.5Mbps 802.11b/g/n20: 11CH Patch Antenna 1.03dBi | | |
| Channel List | Please refer to the | Please refer to the Note 3. | | |
| Rating | Input: DC 9-36V | | | |
| Hardware version number | V209_MB_V1.0_20 | V209_MB_V1.0_20240806 | | |
| Software version number | N/A | | | |
| Connecting I/O Port(s) | Please refer to the Note 1. | | | |

Note:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
- 2. The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.



| Ор | eration Frequency of channel | |
|---------|------------------------------|--|
| · | 802.11b/g/n(20MHz) | |
| Channel | Frequency | |
| 01 | 2412 | |
| 02 | 2417 | |
| 03 | 2422 | |
| 04 | 2427 | |
| 05 | 2432 | |
| 06 | 2437 | |
| 07 | 2442 | |
| 08 | 2447 | |
| 09 | 2452 | |
| 10 | 2457 | |
| 11 | 2462 | |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, themiddle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below: Carrier Frequency Channel

2.4GHz Test Frequency:

| | For 802 | .11b/g/n (HT20) | |
|---|---------|-----------------|---|
| | Channel | Freq.(MHz) | |
| 2 | 01 | 2412 | |
| | 06 | 2437 | |
| | 11 | 2462 | 1 |









2.2 DESCRIPTION OF THE TEST MODES

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Worst Mode | Description | Data Rate |
|------------|---------------------------|-----------|
| Mode 1 | TX IEEE 802.11b CH1 | 1 Mbps |
| Mode 2 | TX IEEE 802.11b CH6 | 1 Mbps |
| Mode 3 | TX IEEE 802.11 b CH11 | 1 Mbps |
| Mode 4 | TX IEEE 802.11g CH1 | 6 Mbps |
| Mode 5 | TX IEEE 802.11g CH6 | 6 Mbps |
| Mode 6 | TX IEEE 802.11g CH11 | 6 Mbps |
| Mode 7 | TX IEEE 802.11n HT20 CH1 | MCS 0 |
| Mode 8 | TX IEEE 802.11n HT20 CH6 | MCS 0 |
| Mode 9 | TX IEEE 802.11n HT20 CH11 | MCS 0 |

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (2) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V /60Hz is shown in the report.

AC Conducted Emission

| | Test Case |
|-----------------------|-------------------------|
| AC Conducted Emission | Mode10: Keeping WIFI TX |

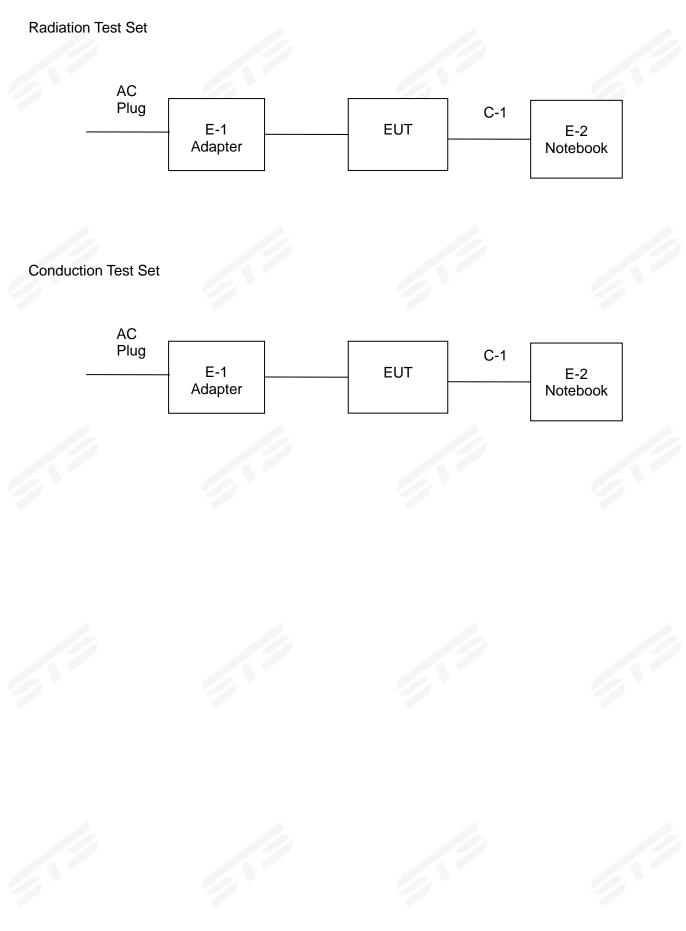
2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

| RF Function | Туре | Mode Or Modulation type | ANT Gain(dBi) | Power Class | Software For Testing |
|-------------|--------------|-------------------------------|------------------|----------------|---------------------------|
| | | 802.11b | | 40 | 1 |
| WIFI(2.4G) | 2.4G WIFI | 802.11g | 1.03 | 40 | EspRFTestTool_v2.8_Manual |
| | | 802.11n(HT20) | | 40 | |



2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED





2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| 2.2 | Necessary accessories | | | | | | | |
|------|-----------------------|-----------------------|--|--------|------|--|--|--|
| Item | Equipment | uipment Mfr/Brand Mod | | Length | Note | | | |
| N/A | N/A | N/A N/A | | N/A | N/A | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Support units

| | | | No. Contraction of the second s | | |
|------|---------------------|----------------------|---|--------|------|
| Item | Equipment Mfr/Brand | | Model/Type No. | Length | Note |
| E-1 | Adapter | XTOOL, AutoProPAD | MX36Z1-1203000 | N/A | N/A |
| E-2 | Notebook | LENOVO | Think Pad E470 | N/A | N/A |
| C-1 | USB Cable | HUA WEI | N/A | 150cm | N/A |

Note:

- (1) For detachable type I/O cable should be specified the length in cm in $\,{}^{\mathbb{F}}\, \text{Length}_{\,\mathbb{J}}$ column.
- (2) "YES" is means "with core"; "NO" is means "without core".



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

| | RF Rac | liation Test Equipme | nt | | |
|-------------------------------|-----------------------------|----------------------|----------------|---------------------|---------------------|
| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
| Temperature & Humidity | SW-108 | SuWei | N/A | 2024.03.15 | 2025.03.14 |
| Pre-Amplifier(0.1M-3GHz) | EM | EM330 | 060665 | 2024.02.23 | 2025.02.22 |
| Pre-Amplifier(1G-18GHz) | SKET | LNPA-01018G-45 | SK2018080901 | 2024.09.23 | 2025.09.22 |
| Pre-Amplifier(18G-40GHz) | e-Amplifier(18G-40GHz) SKET | | SK2018101801 | 2024.02.23 | 2025.02.22 |
| Active loop Antenna | ZHINAN | ZN30900C | 16035 | 2023.02.28 | 2025.02.27 |
| Bilog Antenna | TESEQ | CBL6111D | 34678 | 2024.09.30 | 2025.09.29 |
| Horn Antenna | SCHWARZBECK | BBHA 9120D | 02014 | 2023.09.24 | 2025.09.23 |
| Horn Antenna A-INFOMW | | LB-180400-KF | J211020657 | 2023.10.10 | 2025.10.09 |
| Positioning Controller MF | | MF-7802 | MF-780208587 | N/A | N/A |
| Signal Analyzer R&S | | FSV 40-N | 101823 | 2024.09.23 | 2025.09.22 |
| Switch Control Box N/A | | N/A | N/A | N/A | N/A |
| Filter Box | BALUN Technology | SU319E | BL-SZ1530051 | N/A | N/A |
| Antenna Mast | MF | MFA-440H | N/A | N/A | N/A |
| Turn Table | MF | SC100 1 | 60531 | N/A | N/A |
| AC Power Source | APC | KDF-11010G | F214050035 | N/A | N/A |
| DC power supply | HONGSHENGFENG | DPS-305AF | 17064939 | 2024.09.23 | 2025.09.22 |
| Test SW | EZ-EMC | Ver.STSLAB-03A1 RE | | | |
| | Condu | ction Test equipmen | t | | |
| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
| Test Receiver | R&S | ESCI | 101427 | 2024.09.24 | 2025.09.23 |
| Limtter | CYBERTEK | EM5010 | N/A | 2024.09.24 | 2025.09.23 |
| LISN | R&S | ENV216 | 101242 | 2024.09.24 | 2025.09.23 |
| LISN | EMCO | 3810/2NM | 23625 | 2024.09.24 | 2025.09.23 |
| Temperature & Humidity | SW-108 | SuWei | N/A | 2024.03.15 | 2025.03.14 |
| Test SW | EZ-EMC | | Ver.STSLAB-03A | 1 CE | |
| | RF | Connected Test | | | |
| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until |
| Signal Analyzer | Agilent | N9020A | MY51510623 | 2024.02.23 | 2025.02.22 |
| Power Sensor | Keysight | U2021XA | MY56120038 | 2024.09.23 | 2025.09.22 |
| Temperature & Humidity SW-108 | | SuWei | N/A | 2024.03.15 | 2025.03.14 |
| | | | | | |



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

| | Conducted Emissionlimit (dBuV) | | |
|-----------------|--------------------------------|-----------|--|
| FREQUENCY (MHz) | Quasi-peak | Average | |
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * | |
| 0.50 -5.0 | 56.00 | 46.00 | |
| 5.0 -30.0 | 60.00 | 50.00 | |

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

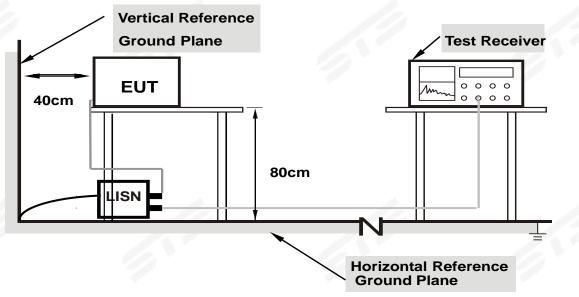
The following table is the setting of the receiver

| Receiver Parameters | Setting | | |
|---------------------|----------|--|--|
| Attenuation | 10 dB | | |
| Start Frequency | 0.15 MHz | | |
| Stop Frequency | 30 MHz | | |
| IF Bandwidth | 9 kHz | | |

3.1.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

3.1.4EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



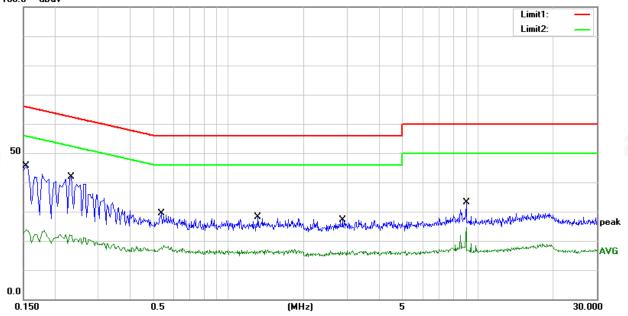
3.1.5 TEST RESULT

| Temperature: | 25.1℃ | Relative Humidity: | 59% |
|---------------|--------------|--------------------|------|
| Test Voltage: | AC 120V/60Hz | Phase: | L // |
| Test Mode: | Mode 10 | 65 | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|----------------|--------|--------|--------|--------|
| | (MHz) | (dBuV) | Factor(d B) | (dBuV) | (dBuV) | (dB) | |
| 1 | 0.1540 | 25.91 | 19.78 | 45.69 | 65.78 | -20.09 | QP |
| 2 | 0.1540 | 4.02 | 19.78 | 23.80 | 55.78 | -31.98 | AVG |
| 3 | 0.2340 | 22.02 | 19.92 | 41.94 | 62.31 | -20.37 | QP |
| 4 | 0.2340 | 2.12 | 19.92 | 22.04 | 52.31 | -30.27 | AVG |
| 5 | 0.5380 | 9.44 | 19.97 | 29.41 | 56.00 | -26.59 | QP |
| 6 | 0.5380 | -1.62 | 19.97 | 18.35 | 46.00 | -27.65 | AVG |
| 7 | 1.3100 | 8.33 | 19.77 | 28.10 | 56.00 | -27.90 | QP |
| 8 | 1.3100 | -3.03 | 19.77 | 16.74 | 46.00 | -29.26 | AVG |
| 9 | 2.8660 | 7.38 | 19.83 | 27.21 | 56.00 | -28.79 | QP |
| 10 | 2.8660 | -3.37 | 19.83 | 16.46 | 46.00 | -29.54 | AVG |
| 11 | 8.9660 | 12.90 | 20.13 | 33.03 | 60.00 | -26.97 | QP |
| 12 | 8.9660 | 4.61 | 20.13 | 24.74 | 50.00 | -25.26 | AVG |

Remark:

- All readings are Quasi-Peak and Average values
 Margin = Result (Result = Reading + Factor)–Limit
- 3. Factor=LISN factor+Cable loss+Limiter (10dB)
- 100.0 dBuV



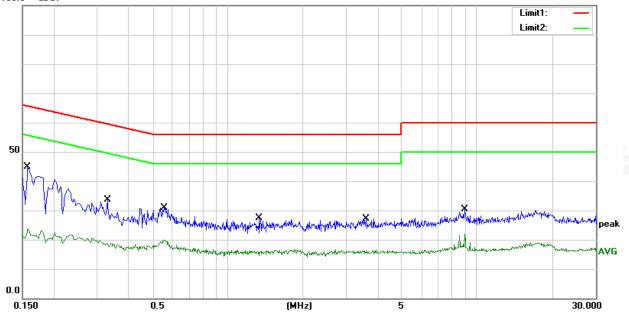


| Temperature: | 25.1 ℃ | Relative Humidity: | 59% |
|---------------|---------------|--------------------|-----|
| Test Voltage: | AC 120V/60Hz | Phase: | N |
| Test Mode: | Mode 10 | | 11 |
| | 1943 C | 100 | 100 |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|----------------|--------|--------|--------|--------|
| | (MHz) | (dBuV) | Factor(d B) | (dBuV) | (dBuV) | (dB) | |
| 1 | 0.1580 | 25.24 | 19.76 | 45.00 | 65.57 | -20.57 | QP |
| 2 | 0.1580 | 3.91 | 19.76 | 23.67 | 55.57 | -31.90 | AVG |
| 3 | 0.3300 | 13.35 | 20.19 | 33.54 | 59.45 | -25.91 | QP |
| 4 | 0.3300 | -1.07 | 20.19 | 19.12 | 49.45 | -30.33 | AVG |
| 5 | 0.5580 | 11.03 | 19.93 | 30.96 | 56.00 | -25.04 | QP |
| 6 | 0.5580 | -0.02 | 19.93 | 19.91 | 46.00 | -26.09 | AVG |
| 7 | 1.3420 | 7.55 | 19.80 | 27.35 | 56.00 | -28.65 | QP |
| 8 | 1.3420 | -3.49 | 19.80 | 16.31 | 46.00 | -29.69 | AVG |
| 9 | 3.5900 | 7.17 | 19.94 | 27.11 | 56.00 | -28.89 | QP |
| 10 | 3.5900 | -3.50 | 19.94 | 16.44 | 46.00 | -29.56 | AVG |
| 11 | 8.9580 | 10.30 | 19.95 | 30.25 | 60.00 | -29.75 | QP |
| 12 | 8.9580 | 1.89 | 19.95 | 21.84 | 50.00 | -28.16 | AVG |

Remark:

- All readings are Quasi-Peak and Average values
 Margin = Result (Result =Reading + Factor)–Limit
 Factor=LISN factor+Cable loss+Limiter (10dB)
- 100.0 dBuV





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2020 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

| Frequencies | Field Strength Measurement Dista | |
|-------------|----------------------------------|----------|
| (MHz) | (micorvolts/meter) | (meters) |
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

LIMITS OF RADIATED EMISSION MEASUREMENT (1000MHz-25GHz)

| | (dBuV/m) (at 3M) | | |
|-----------------|------------------|---------|--|
| FREQUENCY (MHz) | PEAK | AVERAGE | |
| Above 1000 | 74 | 54 | |

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

| FREQUENCY (MHz) | FREQUENCY (MHz) | FREQUENCY (GHz) |
|---------------------|---|---|
| 16.42-16.423 | 399.9-410 | 4.5-5.15 |
| 16.69475-16.69525 | 608-614 | 5.35-5.46 |
| 16.80425-16.80475 | 960-1240 | 7.25-7.75 |
| 25.5-25.67 | 1300-1427 | 8.025-8.5 |
| 37.5-38.25 | 1435-1626.5 | 9.0-9.2 |
| 73-74.6 | 1645.5-1646.5 | 9.3-9.5 |
| 74.8-75.2 | 1660-1710 | 10.6-12.7 |
| 108-121.94 | 1718.8-1722.2 | 13.25-13.4 |
| 123-138 | 2200-2300 | 14.47-14.5 |
| 149.9-150.05 | 2310-2390 | 15.35-16.2 |
| 156.52475-156.52525 | 2483.5-2500 | 17.7-21.4 |
| 156.7-156.9 | 2690-2900 | 22.01-23.12 |
| 162.0125-167.17 | 3260-3267 | 23.6-24.0 |
| 167.72-173.2 | 3332-3339 | 31.2-31.8 |
| 240-285 | 3345.8-3358 | 36.43-36.5 |
| 322-335.4 | 3600-4400 | Above 38.6 |
| | | |
| | 16.42-16.423 16.69475-16.69525 16.80425-16.80475 25.5-25.67 37.5-38.25 73-74.6 74.8-75.2 108-121.94 123-138 149.9-150.05 156.52475-156.52525 156.7-156.9 162.0125-167.17 167.72-173.2 240-285 | 16.42-16.423399.9-41016.69475-16.69525608-61416.80425-16.80475960-124025.5-25.671300-142737.5-38.251435-1626.573-74.61645.5-1646.574.8-75.21660-1710108-121.941718.8-1722.2123-1382200-2300149.9-150.052310-2390156.52475-156.525252483.5-2500156.7-156.92690-2900162.0125-167.173260-3267167.72-173.23332-3339240-2853345.8-3358 |



For Radiated Emission

| Spectrum Parameter | Setting |
|---------------------------------|-------------------------------|
| Attenuation | Auto |
| Detector | Peak/QP/AV |
| Start Frequency | 9 KHz/150KHz(Peak/QP/AV) |
| Stop Frequency | 150KHz/30MHz(Peak/QP/AV) |
| | 200Hz (From 9kHz to 0.15MHz)/ |
| RB / VB (emission in restricted | 9KHz (From 0.15MHz to 30MHz); |
| band) | 200Hz (From 9kHz to 0.15MHz)/ |
| | 9KHz (From 0.15MHz to 30MHz) |

| 1 | |
|---------------------------------|--------------------|
| Spectrum Parameter | Setting |
| Attenuation | Auto |
| Detector | Peak/QP |
| Start Frequency | 30 MHz(Peak/QP) |
| Stop Frequency | 1000 MHz (Peak/QP) |
| RB / VB (emission in restricted | 120 KHz / 300 KHz |
| band) | |

| | and the second | |
|----|--|-------------------------------|
| | Spectrum Parameter | Setting |
| | Attenuation | Auto |
| 1 | Detector | Peak/AV |
| | Start Frequency | 1000 MHz(Peak/AV) |
| | Stop Frequency | 10th carrier hamonic(Peak/AV) |
| | RB / VB (emission in restricted | 1 MHz / 3 MHz(Peak) |
| | band) | 1 MHz/1/T MHz(AVG) |
| Fo | or Restricted band | |
| | | |

| | Spectrum Parameter | Setting | | |
|---|----------------------|-----------------------------------|--|--|
| | Detector | Peak/AV | | |
| Ĵ | Start/Stop Eroguapov | Lower Band Edge: 2310 to 2430 MHz | | |
| | Start/Stop Frequency | Upper Band Edge: 2445 to 2500 MHz | | |
| | RB / VB | 1 MHz / 3 MHz(Peak) | | |
| | | 1 MHz/1/T MHz(AVG) | | |



| Receiver Parameter | Setting |
|------------------------|--------------------------------------|
| Start ~ Stop Frequency | 9kHz~90kHz / RB 200Hz for PK & AV |
| Start ~ Stop Frequency | 90kHz~110kHz / RB 200Hz for QP |
| Start ~ Stop Frequency | 110kHz~490kHz / RB 200Hz for PK & AV |
| Start ~ Stop Frequency | 490kHz~30MHz / RB 9kHz for QP |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |

3.2.2 TEST PROCEDURE

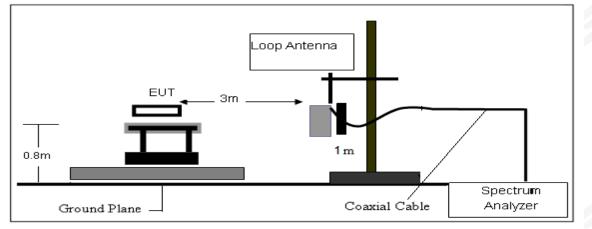
- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

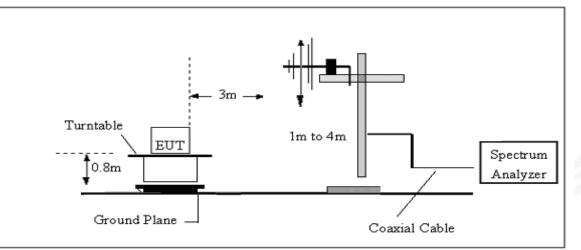


3.2.3 TEST SETUP

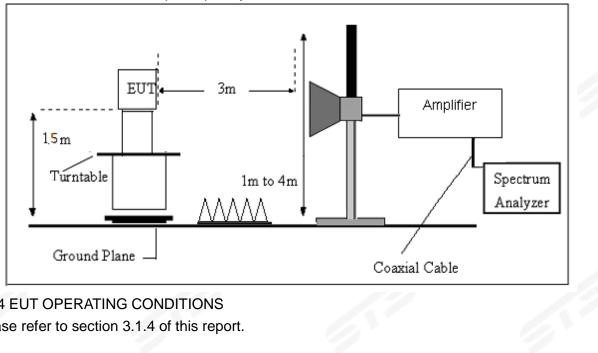
(A) Radiated Emission Test-Up Frequency Below 30MHz

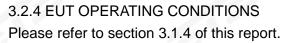


(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz







3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AGWhere FS = Field Strength CL = Cable Attenuation Factor (Cable Loss) RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

| Frequency | FS | RA | AF | CL | AG | Factor |
|-----------|----------|----------|------|------|------|--------|
| (MHz) | (dBµV/m) | (dBµV/m) | (dB) | (dB) | (dB) | (dB) |
| 300 | 40 | 58.1 | 12.2 | 1.6 | 31.9 | -18.1 |

Factor=AF+CL-AG













3.2.6 TEST RESULT

9KHz-30MHz

| Temperature: | 23.4 ℃ | Relative Humidtity: | 60% |
|---------------|---------------|---------------------|-----|
| Test Voltage: | AC 120V/60Hz | Polarization: | - 9 |
| Test Mode: | TX Mode | | |

| Freq. | Reading | Limit | Margin | State | Test |
|-------|----------|----------|--------|-------|--------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB) | P/F | Result |
| | | | | | PASS |
| | - | - | - | | PASS |

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

permissible value has no need to be reported. Distance extrapolation factor =40 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor.



(30MHz - 1000MHz)

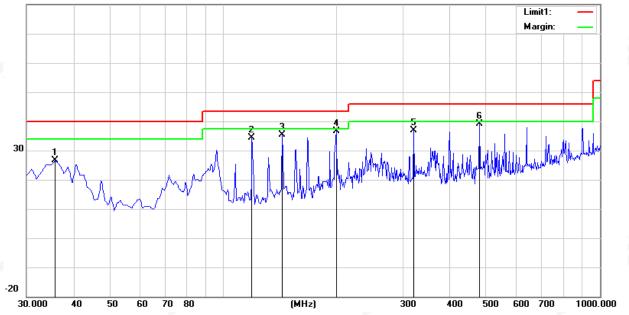
| Temperature: | 23.4°C | Relative Humidtity: | 60% | |
|---------------|--|---------------------|------------|--|
| Test Voltage: | AC 120V/60Hz | Phase: | Horizontal | |
| Test Mode: | Mode 1/2/3/4/5/6/7/8/9 (Mode 6 worst mode) | | | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|------------------|----------|----------|--------|--------|
| | (MHz) | (dBuV) | Factor(dB/ m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 35.8200 | 42.49 | -15.91 | 26.58 | 40.00 | -13.42 | peak |
| 2 | 119.2400 | 52.83 | -18.38 | 34.45 | 43.50 | -9.05 | peak |
| 3 | 143.4900 | 53.65 | -18.23 | 35.42 | 43.50 | -8.08 | peak |
| 4 | 199.7500 | 57.78 | -21.11 | 36.67 | 43.50 | -6.83 | peak |
| 5 | 320.0300 | 50.94 | -14.00 | 36.94 | 46.00 | -9.06 | peak |
| 6 | 480.0800 | 47.67 | -8.65 | 39.02 | 46.00 | -6.98 | peak |

Remark:

- 1. Margin = Result (Result = Reading + Factor)-Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain
- 3. All modes have been tested, only show the worst case.







Report No.: STS2410099W02

| Temperature: | 23.4℃ | Relative Humidtity: | 60% | |
|---|--------------|---------------------|----------|--|
| Test Voltage: | AC 120V/60Hz | Phase: | Vertical | |
| Test Mode: Mode 1/2/3/4/5/6/7/8/9 (Mode 6 worst mode) | | | | |

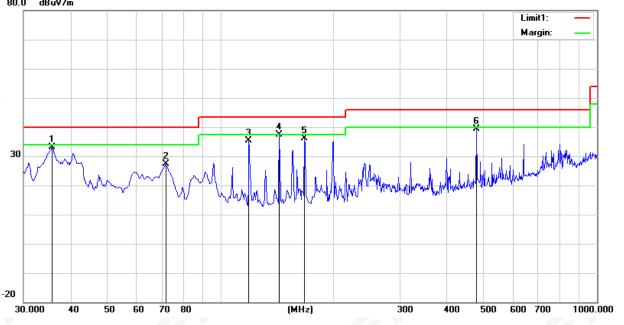
| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|------------------|----------|----------|--------|--------|
| | (MHz) | (dBuV) | Factor(dB/ m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 35.8200 | 49.16 | -15.91 | 33.25 | 40.00 | -6.75 | peak |
| 2 | 71.7100 | 51.90 | -24.56 | 27.34 | 40.00 | -12.66 | peak |
| 3 | 119.2400 | 53.70 | -18.38 | 35.32 | 43.50 | -8.18 | peak |
| 4 | 143.4900 | 55.66 | -18.23 | 37.43 | 43.50 | -6.07 | peak |
| 5 | 167.7400 | 55.74 | -19.58 | 36.16 | 43.50 | -7.34 | peak |
| 6 | 480.0800 | 48.12 | -8.65 | 39.47 | 46.00 | -6.53 | peak |

Remark:.

Margin = Result (Result = Reading + Factor)–Limit
 Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

3. All modes have been tested, only show the worst case.

80.0 dBuV/m





(1000MHz-25GHz) Spurious emission Requirements

| Frequency | Meter Reading | Amplifier | Loss | Antenna Factor | Corrected Factor | Emission Level | Limits | Margin | Detector | Comment |
|-----------|------------------|-----------|-------|-------------------|---------------------|-------------------|----------|--------|----------|------------|
| (MHz) | (dBµV) | (dB) | (dB) | (dB/m) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | Туре | Common |
| | | | | Low Ch | annel (802.11g | /2412 MHz) | | | 100 M | |
| 3264.61 | 61.60 | 44.70 | 6.70 | 28.20 | -9.80 | 51.80 | 74.00 | -22.20 | PK | Vertical |
| 3264.61 | 51.46 | 44.70 | 6.70 | 28.20 | -9.80 | 41.66 | 54.00 | -12.34 | AV | Vertical |
| 3264.79 | 61.34 | 44.70 | 6.70 | 28.20 | -9.80 | 51.54 | 74.00 | -22.46 | PK | Horizontal |
| 3264.79 | 50.25 | 44.70 | 6.70 | 28.20 | -9.80 | 40.45 | 54.00 | -13.55 | AV | Horizontal |
| 4824.37 | 59.21 | 44.20 | 9.04 | 31.60 | -3.56 | 55.65 | 74.00 | -18.35 | PK | Vertical |
| 4824.37 | 49.33 | 44.20 | 9.04 | 31.60 | -3.56 | 45.77 | 54.00 | -8.23 | AV | Vertical |
| 4824.44 | 59.23 | 44.20 | 9.04 | 31.60 | -3.56 | 55.67 | 74.00 | -18.33 | PK | Horizontal |
| 4824.44 | 50.14 | 44.20 | 9.04 | 31.60 | -3.56 | 46.58 | 54.00 | -7.42 | AV | Horizontal |
| 5359.73 | 48.61 | 44.20 | 9.86 | 32.00 | -2.34 | 46.27 | 74.00 | -27.73 | PK | Vertical |
| 5359.73 | 39.56 | 44.20 | 9.86 | 32.00 | -2.34 | 37.22 | 54.00 | -16.78 | AV | Vertical |
| 5359.70 | 47.17 | 44.20 | 9.86 | 32.00 | -2.34 | 44.83 | 74.00 | -29.17 | PK | Horizontal |
| 5359.70 | 38.87 | 44.20 | 9.86 | 32.00 | -2.34 | 36.53 | 54.00 | -17.47 | AV | Horizontal |
| 7235.71 | 54.34 | 43.50 | 11.40 | 35.50 | 3.40 | 57.74 | 74.00 | -16.26 | PK | Vertical |
| 7235.71 | 43.98 | 43.50 | 11.40 | 35.50 | 3.40 | 47.38 | 54.00 | -6.62 | AV | Vertical |
| 7235.81 | 53.94 | 43.50 | 11.40 | 35.50 | 3.40 | 57.34 | 74.00 | -16.66 | PK | Horizontal |
| 7235.81 | 44.63 | 43.50 | 11.40 | 35.50 | 3.40 | 48.03 | 54.00 | -5.97 | AV | Horizontal |
| | • | I. | 1 | Middle C | hannel (802.11 | g/2437 MHz) | I | 1 | I. | |
| 3264.69 | 61.92 | 44.70 | 6.70 | 28.20 | -9.80 | 52.12 | 74.00 | -21.88 | PK | Vertical |
| 3264.69 | 49.84 | 44.70 | 6.70 | 28.20 | -9.80 | 40.04 | 54.00 | -13.96 | AV | Vertical |
| 3264.66 | 61.00 | 44.70 | 6.70 | 28.20 | -9.80 | 51.20 | 74.00 | -22.80 | PK | Horizontal |
| 3264.66 | 51.30 | 44.70 | 6.70 | 28.20 | -9.80 | 41.50 | 54.00 | -12.50 | AV | Horizontal |
| 4874.34 | 59.17 | 44.20 | 9.04 | 31.60 | -3.56 | 55.61 | 74.00 | -18.39 | PK | Vertical |
| 4874.34 | 49.18 | 44.20 | 9.04 | 31.60 | -3.56 | 45.62 | 54.00 | -8.38 | AV | Vertical |
| 4874.39 | 59.51 | 44.20 | 9.04 | 31.60 | -3.56 | 55.95 | 74.00 | -18.05 | PK | Horizontal |
| 4874.39 | 49.21 | 44.20 | 9.04 | 31.60 | -3.56 | 45.65 | 54.00 | -8.35 | AV | Horizontal |
| 5359.83 | 48.14 | 44.20 | 9.86 | 32.00 | -2.34 | 45.80 | 74.00 | -28.20 | PK | Vertical |
| 5359.83 | 39.51 | 44.20 | 9.86 | 32.00 | -2.34 | 37.17 | 54.00 | -16.83 | AV | Vertical |
| 5359.58 | 47.39 | 44.20 | 9.86 | 32.00 | -2.34 | 45.05 | 74.00 | -28.95 | PK | Horizontal |
| 5359.58 | 38.40 | 44.20 | 9.86 | 32.00 | -2.34 | 36.06 | 54.00 | -17.94 | AV | Horizontal |
| 7310.76 | 54.32 | 43.50 | 11.40 | 35.50 | 3.40 | 57.72 | 74.00 | -16.28 | PK | Vertical |
| 7310.76 | 44.42 | 43.50 | 11.40 | 35.50 | 3.40 | 47.82 | 54.00 | -6.18 | AV | Vertical |
| 7310.72 | 53.93 | 43.50 | 11.40 | 35.50 | 3.40 | 57.33 | 74.00 | -16.67 | PK | Horizontal |
| 7310.72 | 44.23 | 43.50 | 11.40 | 35.50 | 3.40 | 47.63 | 54.00 | -6.37 | AV | Horizontal |



Report No.: STS2410099W02

| | | | | High Chan | nel (802.11g | /2462 MHz) | | | | |
|---------|-------|-------|-------|-----------|--------------|------------|-------|--------|----|------------|
| 3264.84 | 61.24 | 44.70 | 6.70 | 28.20 | -9.80 | 51.44 | 74.00 | -22.56 | PK | Vertical |
| 3264.84 | 51.78 | 44.70 | 6.70 | 28.20 | -9.80 | 41.98 | 54.00 | -12.02 | AV | Vertical |
| 3264.80 | 61.66 | 44.70 | 6.70 | 28.20 | -9.80 | 51.86 | 74.00 | -22.14 | PK | Horizontal |
| 3264.80 | 50.87 | 44.70 | 6.70 | 28.20 | -9.80 | 41.07 | 54.00 | -12.93 | AV | Horizontal |
| 4924.57 | 59.00 | 44.20 | 9.04 | 31.60 | -3.56 | 55.44 | 74.00 | -18.56 | PK | Vertical |
| 4924.57 | 49.83 | 44.20 | 9.04 | 31.60 | -3.56 | 46.27 | 54.00 | -7.73 | AV | Vertical |
| 4924.32 | 59.51 | 44.20 | 9.04 | 31.60 | -3.56 | 55.95 | 74.00 | -18.05 | PK | Horizontal |
| 4924.32 | 50.37 | 44.20 | 9.04 | 31.60 | -3.56 | 46.81 | 54.00 | -7.19 | AV | Horizontal |
| 5359.72 | 48.81 | 44.20 | 9.86 | 32.00 | -2.34 | 46.47 | 74.00 | -27.53 | PK | Vertical |
| 5359.72 | 39.96 | 44.20 | 9.86 | 32.00 | -2.34 | 37.62 | 54.00 | -16.38 | AV | Vertical |
| 5359.83 | 47.11 | 44.20 | 9.86 | 32.00 | -2.34 | 44.77 | 74.00 | -29.23 | PK | Horizontal |
| 5359.83 | 38.10 | 44.20 | 9.86 | 32.00 | -2.34 | 35.76 | 54.00 | -18.24 | AV | Horizontal |
| 7385.77 | 53.82 | 43.50 | 11.40 | 35.50 | 3.40 | 57.22 | 74.00 | -16.78 | PK | Vertical |
| 7385.77 | 43.84 | 43.50 | 11.40 | 35.50 | 3.40 | 47.24 | 54.00 | -6.76 | AV | Vertical |
| 7385.80 | 53.52 | 43.50 | 11.40 | 35.50 | 3.40 | 56.92 | 74.00 | -17.08 | PK | Horizontal |
| 7385.80 | 43.54 | 43.50 | 11.40 | 35.50 | 3.40 | 46.94 | 54.00 | -7.06 | AV | Horizontal |

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

All modes have been measurement, only worst mode was reported. Emission Level = Reading + Factor

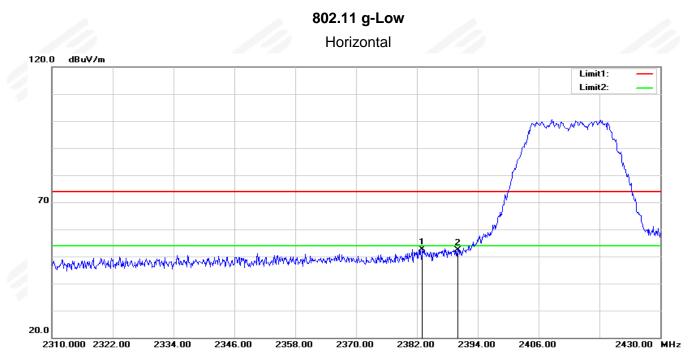
Margin = Emission Level-Limit

3. The frequency emission of peak points that did not show above the forms are at least 20dB below

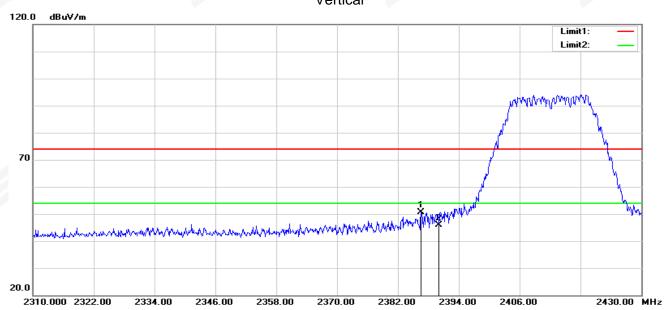
the limit, the frequency emission is mainly from the environment noise.



3.2.6 TEST RESULTS(Band edge Requirements)



| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|--------------|----------|----------|--------|--------|
| | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2383.080 | 48.44 | 4.23 | 52.67 | 74.00 | -21.33 | peak |
| 2 | 2390.000 | 48.04 | 4.34 | 52.38 | 74.00 | -21.62 | peak |

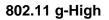


| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|--------------|----------|----------|--------|--------|
| | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2386.560 | 46.30 | 4.28 | 50.58 | 74.00 | -23.42 | peak |
| 2 | 2390.000 | 41.55 | 4.34 | 45.89 | 74.00 | -28.11 | peak |

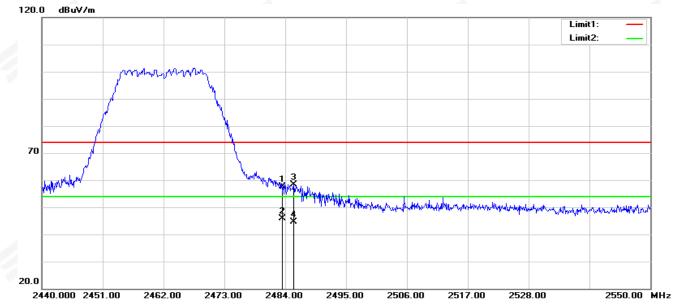
Vertical



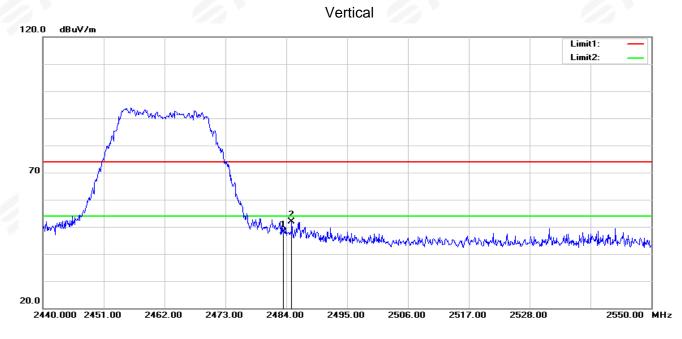
Page 29 of 78



Horizontal



| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|--------------|----------|----------|--------|--------|
| | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2483.500 | 53.02 | 4.60 | 57.62 | 74.00 | -16.38 | peak |
| 2 | 2483.500 | 41.18 | 4.60 | 45.78 | 54.00 | -8.22 | AVG |
| 3 | 2485.540 | 53.88 | 4.61 | 58.49 | 74.00 | -15.51 | peak |
| 4 | 2485.540 | 39.93 | 4.61 | 44.54 | 54.00 | -9.46 | AVG |



| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|-----|-----------|---------|--------------|----------|----------|--------|--------|
| 1 | (MHz) | (dBuV) | Factor(dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2483.500 | 43.41 | 4.60 | 48.01 | 74.00 | -25.99 | peak |
| 2 | 2484.990 | 47.33 | 4.61 | 51.94 | 74.00 | -22.06 | peak |

Note: All modes have been measurement, only worst mode was reported.

Max hold



4. CONDUCTED SPURIOUS & BAND EDGE EMISSION

4.1 LIMIT

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

4.2 TEST PROCEDURE

| Spectrum Parameter | Setting |
|---------------------------------------|-----------------------------------|
| Detector | Peak |
| Start/Stop Frequency | 30 MHz to 10th carrier harmonic |
| RB / VB (emission in restricted band) | 100 KHz/300 KHz |
| Trace-Mode: | Max hold |
| For Band edge | |
| Spectrum Parameter | Setting |
| Detector | Peak |
| Stort/Ston Fraguency | Lower Band Edge: 2300 to 2432 MHz |
| Start/Stop Frequency | Upper Band Edge: 2442 to 2500 MHz |
| RB / VB (emission in restricted band) | 100 KHz/300 KHz |

4.3 DEVIATION FROM STANDARD No deviation.

Trace-Mode:

4.4 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

4.5 EUT OPERATION CONDITIONSPlease refer to section 3.1.4 of this report.4.6 TEST RESULTS



5. POWER SPECTRAL DENSITY TEST

5.1 LIMIT

| | FCC Part15.247, Subpart C | | | | | | | |
|-----------|---------------------------|-----------------------|--------------------------|--------|--|--|--|--|
| Section | Test Item | Limit | Frequency Range (MHz) | Result | | | | |
| 15.247(e) | Power Spectral Density | ≤8 dBm (RBW ≥3KHz) | 2400-2483.5 | PASS | | | | |

5.2 TEST PROCEDURE

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the 100 kHz \ge RBW \ge 3 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.3 DEVIATION FROM STANDARD No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS Please refer to section 3.1.4 of this report.

5.6 TEST RESULTS



6. BANDWIDTH TEST

6.1 LIMIT

| FCC Part15.247,Subpart C | | | | | | | |
|--------------------------|-----------|----------------------------|--------------------------|--------|--|--|--|
| Section | Test Item | Limit | Frequency Range (MHz) | Result | | | |
| 15.247(a)(2) | Bandwidth | ≥500KHz (6dB bandwidth) | 2400-2483.5 | PASS | | | |

6.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW \geq 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be \geq 6 dB.

6.3 DEVIATION FROM STANDARD No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS Please refer to section 3.1.4 of this report.

6.6 TEST RESULTS



7. PEAK OUTPUT POWER TEST

7.1 LIMIT

| FCC Part15.247,Subpart C | | | | | | | |
|--------------------------|--------------|-----------------|--------------------------|--------|--|--|--|
| Section | Test Item | Limit | Frequency Range (MHz) | Result | | | |
| 15.247(b)(3) | Output Power | 1 watt or 30dBm | 2400-2483.5 | PASS | | | |

7.2 TEST PROCEDURE

One of the following procedures may be used to determine the averaging conducted output powe r of a DTS EUT.

Method AVGSA-2 uses trace averaging across ON and OFF times of the EUT transmissions, foll owed by duty cycle correction. The procedure for this method is as follows:

a) Measure the duty cycle D of the transmitter output signal as described in 11.6.

b) Set span to at least 1.5 times the OBW.

c) Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.

d) Set VBW \geq [3 × RBW].

e) Number of points in sweep \geq [2 × span / RBW]. (This gives bin-to-bin spacing \leq RBW / 2, so th at narrowband signals are not lost between frequency bins.)

f) Sweep time = auto.

g) Detector = RMS (i.e., power averaging), if available. Otherwise, use the sample detector mode
 h) Do not use sweep triggering. Allow the sweep to "free run."

i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of trac es to be averaged shall be increased above 100 as needed such that the average accurately re presents the true average over the ON and OFF periods of the transmitter.

j) Compute power by integrating the spectrum across the OBW of the signal using the instrument 's band power measurement function with band limits set equal to the OBW band edges. If the in strument does not have a band power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average o ver both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

a) Set the RBW = 1 MHz.

b) Set the VBW \geq [3 × RBW].

c) Set the span \geq [1.5 × DTS bandwidth].

d) Detector = peak.

e) Sweep time = auto couple.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

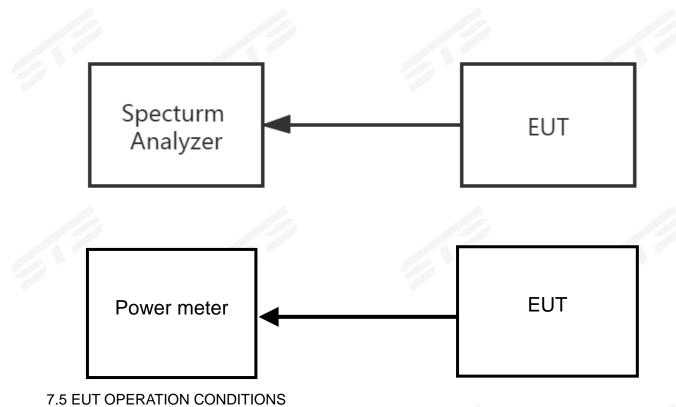
h) Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

7.3 DEVIATION FROM STANDARD No deviation.





Please refer to section 3.1.4 of this report.

7.6 TEST RESULTS



8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible partyshall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is Patch Antenna. It comply with the standard requirement.



1. Duty Cycle

| Condition | Mode | Frequency (MHz) | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|----------------|------------------------|-----------|
| NVNT | b | 2412 | 89.84 | 0.47 | 0.99 |
| NVNT | b | 2437 | 89.84 | 0.47 | 0.99 |
| NVNT | b | 2462 | 89.84 | 0.47 | 0.99 |
| NVNT | g | 2412 | 90.07 | 0.45 | 1.62 |
| NVNT | g | 2437 | 90.09 | 0.45 | 1.62 |
| NVNT | g | 2462 | 90.09 | 0.45 | 1.62 |
| NVNT | n20 | 2412 | 89.88 | 0.46 | 1.63 |
| NVNT | n20 | 2437 | 89.88 | 0.46 | 1.63 |
| NVNT | n20 | 2462 | 89.75 | 0.47 | 1.63 |
| | | | | | |

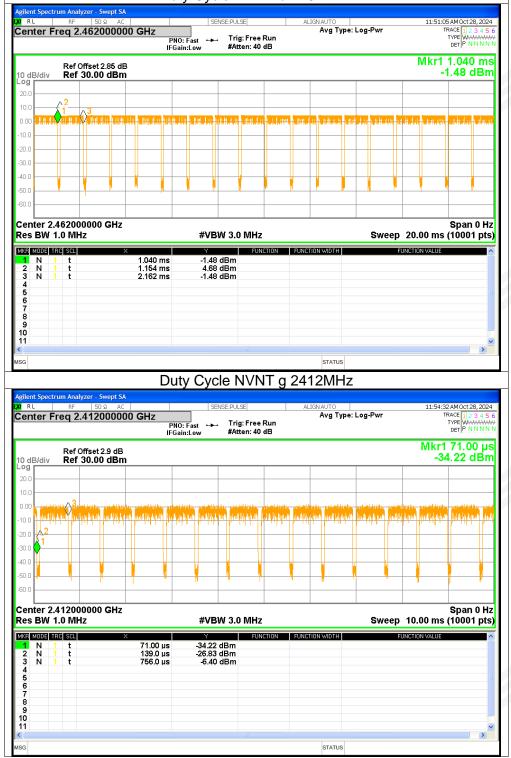


Page 37 of 78

Test Graphs Duty Cycle NVNT b 2412MHz 03 AM Oct 28 Center Freq 2.412000000 GHz Avg Type: Log-Pwr TRACE Trig: Free Run #Atten: 40 dB DET P N N N N PNO: Fast IFGain:Low Mkr1 880.0 µs 3.08 dBm Ref Offset 2.9 dB Ref 30.00 dBm I0 dB/div 20 0.00 30.0 40.0 60. Center 2.412000000 GHz Res BW 1.0 MHz Span 0 Hz Sweep 20.00 ms (10001 pts) #VBW 3.0 MHz MKR MODE TRC SCL EUNCTION WIDTH EUNCTION VALUE UNCTION 3.08 dBm 4.64 dBm 3.22 dBm 880.0 µs 994.0 µs 2.002 ms N N N t 2 3 4 5 6 7 8 9 10 11 > STATUS SG Duty Cycle NVNT b 2437MHz Swept S RL)7 AM Oct 28, 2024 Center Freq 2.437000000 GHz Avg Type: Log-Pwr TRACE Trig: Free Run #Atten: 40 dB PNO: Fast +++ IFGain:Low DET P N N N N Mkr1 1.106 ms -1.35 dBm Ref Offset 2.88 dB Ref 30.00 dBm 0 dB(di) 20.1 0.00 20.0 30.0 . 40 C Center 2.437000000 GHz Res BW 1.0 MHz Span 0 Hz Sweep 20.00 ms (10001 pts) #VBW 3.0 MHz MKR MODE TRC SCL FUNCTION VALUE FUNCTION FUNCTION WIDTH -1.35 dBm 4.73 dBm -1.42 dBm 1.106 ms 1.220 ms 2.228 ms N N N 2 3 4 5 6 7 8 9 10 t t STATUS

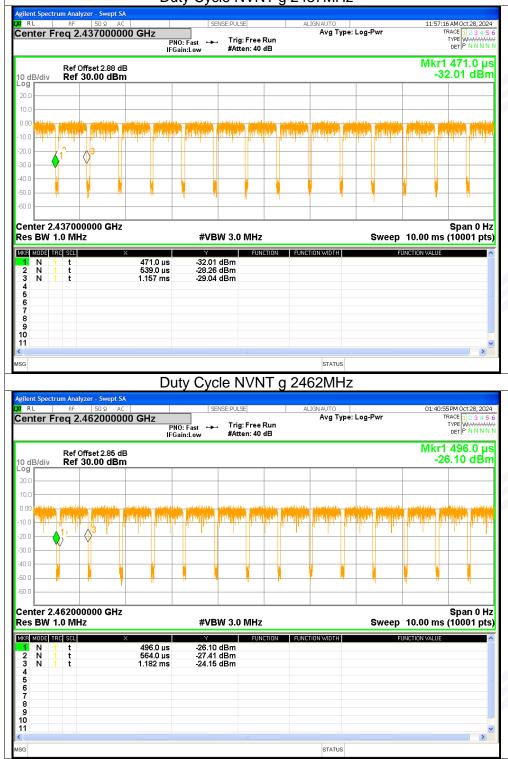


Duty Cycle NVNT b 2462MHz



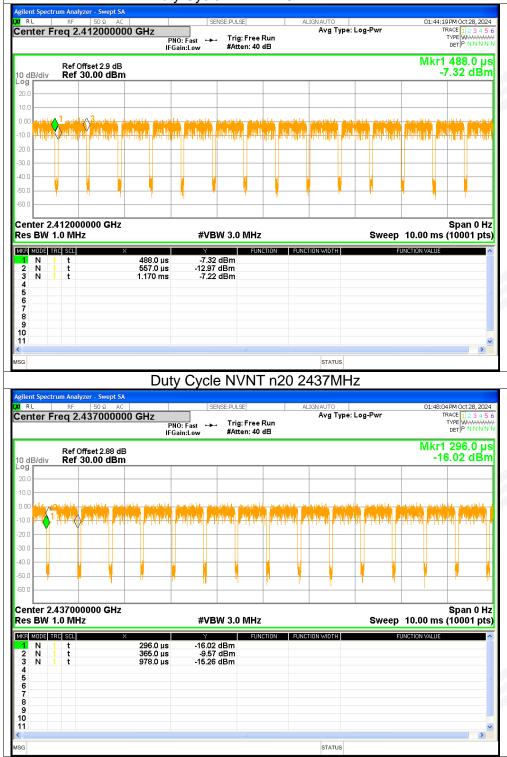


Duty Cycle NVNT g 2437MHz



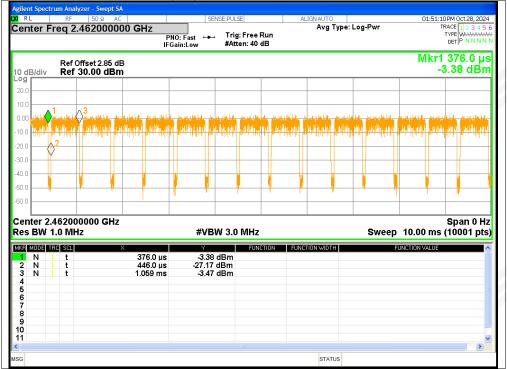


Duty Cycle NVNT n20 2412MHz





Duty Cycle NVNT n20 2462MHz















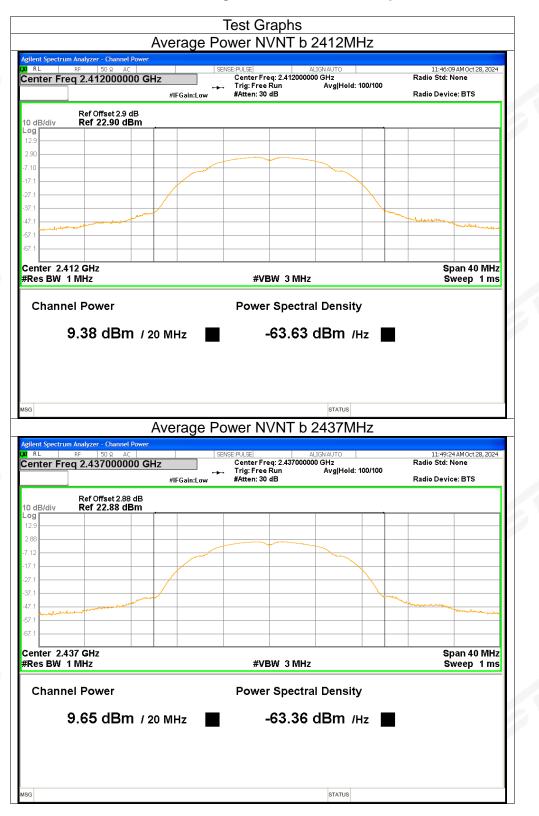




2. Maximum Average Conducted Output Power

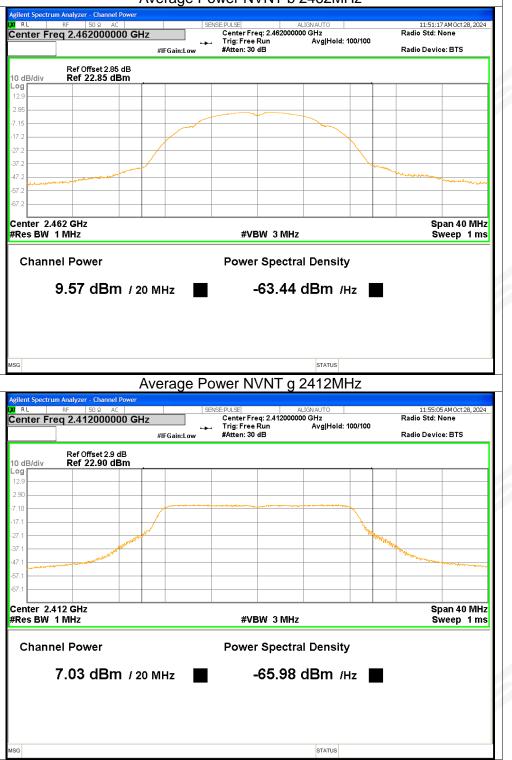
| Condition | Mode | Frequency (MHz) | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|--------------------|--------------------------|---------------------|----------------------|----------------|---------|
| NVNT | b | 2412 | 9.38 | 0.47 | 9.85 | <=30 | Pass |
| NVNT | b | 2437 | 9.65 | 0.47 | 10.12 | <=30 | Pass |
| NVNT | b | 2462 | 9.57 | 0.47 | 10.04 | <=30 | Pass |
| NVNT | g | 2412 | 7.03 | 0.45 | 7.48 | <=30 | Pass |
| NVNT | g | 2437 | 7.34 | 0.45 | 7.79 | <=30 | Pass |
| NVNT | g | 2462 | 7.63 | 0.45 | 8.08 | <=30 | Pass |
| NVNT | n20 | 2412 | 7 | 0.46 | 7.46 | <=30 | Pass |
| NVNT | n20 | 2437 | 7.26 | 0.46 | 7.72 | <=30 | Pass |
| NVNT | n20 | 2462 | 7.44 | 0.47 | 7.91 | <=30 | Pass |











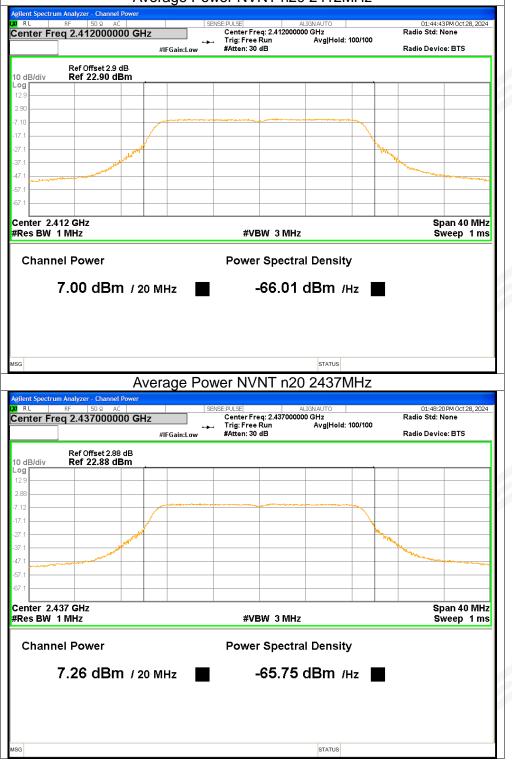






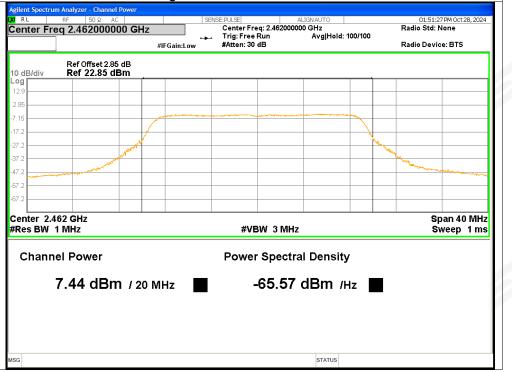


Average Power NVNT n20 2412MHz





Average Power NVNT n20 2462MHz





3. Maximum Peak Conducted Output Power

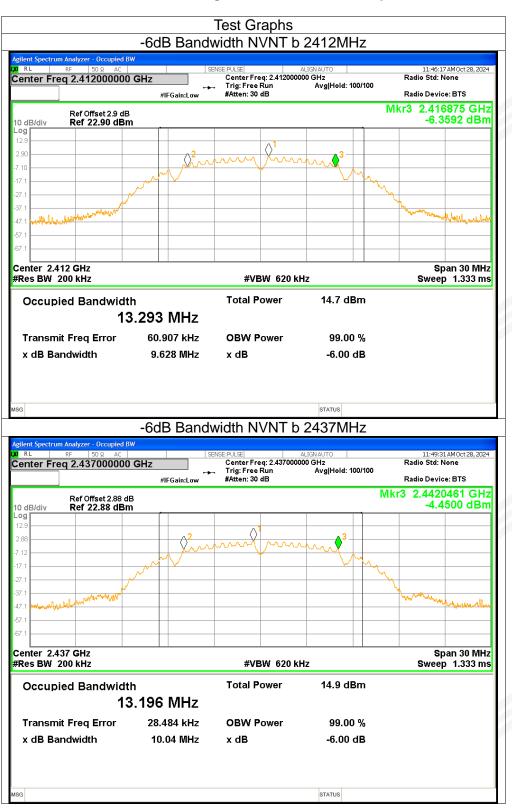
| Condition | Mode | Frequency (MHz) | Conducted Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|-----------------------|-------------|---------|
| NVNT | b | 2412 | 13.03 | <=30 | Pass |
| NVNT | b | 2437 | 13.2 | <=30 | Pass |
| NVNT | b | 2462 | 12.96 | <=30 | Pass |
| NVNT | g | 2412 | 15.32 | <=30 | Pass |
| NVNT | g | 2437 | 15.57 | <=30 | Pass |
| NVNT | g | 2462 | 15.8 | <=30 | Pass |
| NVNT | n20 | 2412 | 15.25 | <=30 | Pass |
| NVNT | n20 | 2437 | 15.52 | <=30 | Pass |
| NVNT | n20 | 2462 | 15.65 | <=30 | Pass |



4. -6dB Bandwidth

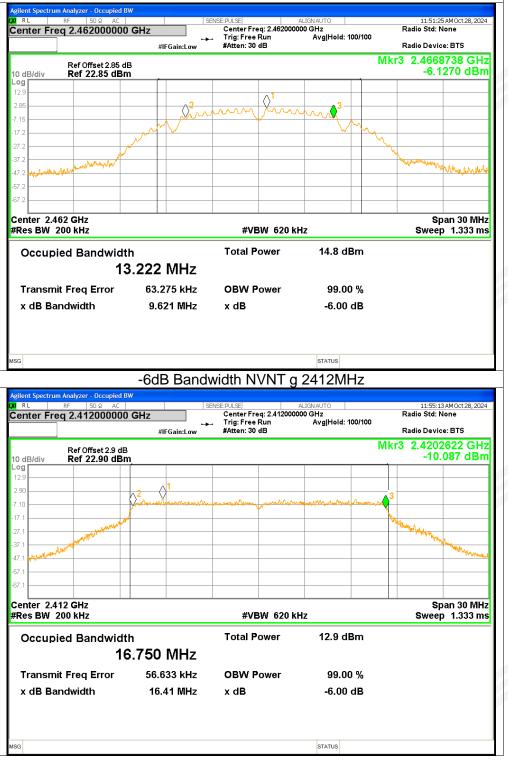
| Condition | Mode | Frequency (MHz) | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|-----------------------|-----------------------------|---------|
| NVNT | b | 2412 | 9.6283 | >=0.5 | Pass |
| NVNT | b | 2437 | 10.0352 | >=0.5 | Pass |
| NVNT | b | 2462 | 9.621 | >=0.5 | Pass |
| NVNT | g | 2412 | 16.4111 | >=0.5 | Pass |
| NVNT | g | 2437 | 16.3963 | >=0.5 | Pass |
| NVNT | g | 2462 | 16.3956 | >=0.5 | Pass |
| NVNT | n20 | 2412 | 17.6414 | >=0.5 | Pass |
| NVNT | n20 | 2437 | 17.6225 | >=0.5 | Pass |
| NVNT | n20 | 2462 | 17.5863 | >=0.5 | Pass |





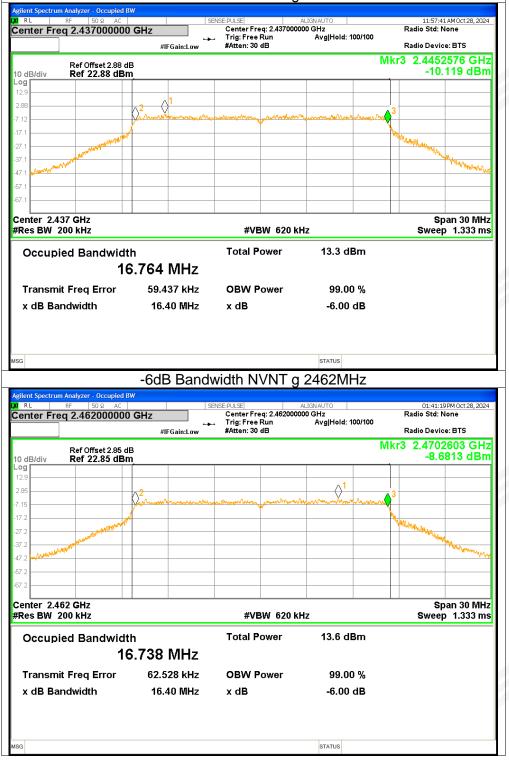


-6dB Bandwidth NVNT b 2462MHz





-6dB Bandwidth NVNT g 2437MHz





-6dB Bandwidth NVNT n20 2412MHz





-6dB Bandwidth NVNT n20 2462MHz

| | 2000000 (| | in:Low | | | Avg Hold: 1 | 103/103 | Radio Std: Radio Devi | |
|---|-------------------------------------|----------------|------------------|---------------------|-------------------|-------------|-----------------|--------------------------|-------------------------|
| dB/div Ref 2 | ffset 2.85 dB 2 2.85 dB m | | | | | | Mk | | 8169 GH: 0151 dBn |
| 9 | | | | | | | | | |
| 5 | <mark>∕2</mark> | an ann | AN | an Autor Butter | he will be able : | 1 | Ml a Mark de la | 3 | |
| | | Lock March 197 | er, sowet webbee | and that is the the | and the spir by | | | | |
| الىيا. | prophilitier . | | | | | | | " " Wanner and | |
| - And | | | | | | | | | Harris March announces |
| | | | | | | | | | |
| | | | | | | | | | |
| nter 2.462 GHz es BW 200 kHz | | | | #VE | SW 620 KH | z | | | pan 30 MH: p=1.333 m |
| Occupied Ba | ndwidth | | | Total P | ower | 13.5 d | Bm | | |
| | 17. | 860 N | IHz | | | | | | |
| ransmit Freq | Error | 23.724 | kHz | OBW P | ower | 99.00 | 0% | | |
| dB Bandwidt | h | 17.59 | MHz | x dB | | -6.00 | dB | | |
| | | | | | | | | | |

















5. Maximum Power Spectral Density Level

| Condition | Mode | Frequency (MHz) | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|------|-----------------|----------------|------------------|---------|
| NVNT | b | 2412 | -14.13 | <=8 | Pass |
| NVNT | b | 2437 | -14.45 | <=8 | Pass |
| NVNT | b | 2462 | -13.94 | <=8 | Pass |
| NVNT | g | 2412 | -17.11 | <=8 | Pass |
| NVNT | g | 2437 | -18.16 | <=8 | Pass |
| NVNT | g | 2462 | -17.32 | <=8 | Pass |
| NVNT | n20 | 2412 | -18.17 | <=8 | Pass |
| NVNT | n20 | 2437 | -17.84 | <=8 | Pass |
| NVNT | n20 | 2462 | -16.4 | <=8 | Pass |



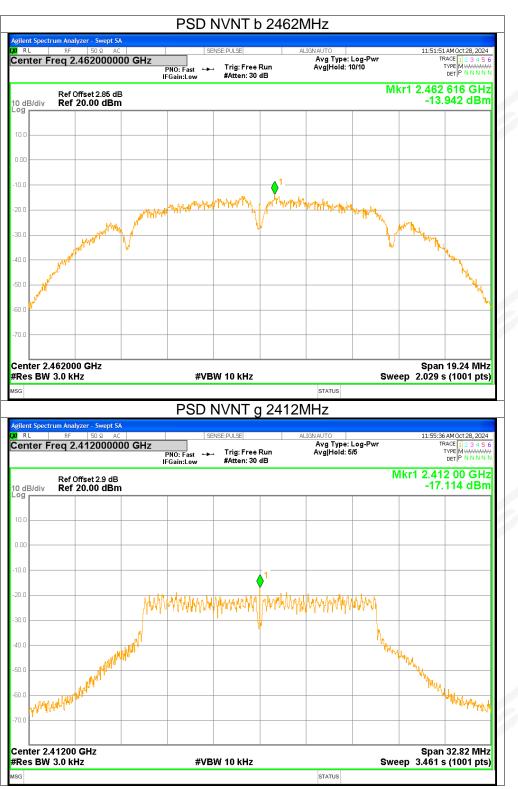
Page 56 of 78



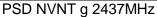


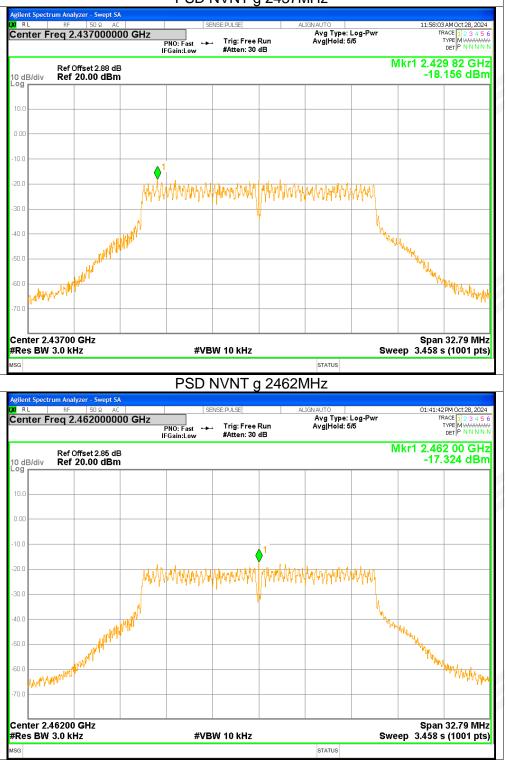


Page 57 of 78





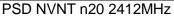


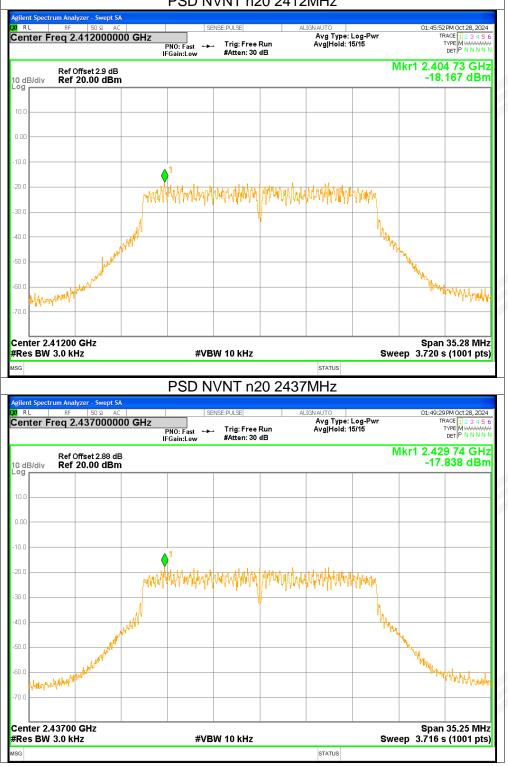




Page 59 of 78

Report No.: STS2410099W02

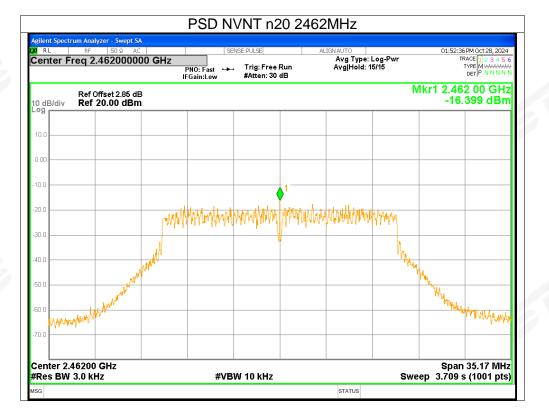






Page 60 of 78

Report No.: STS2410099W02





6. Band Edge

| | U | | | | |
|-----------|----------|-----------------|-----------------|-------------|---------|
| Condition | Mode | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
| NVNT | b | 2412 | -43.69 | <=-20 | Pass |
| NVNT | b | 2462 | -51.07 | <=-20 | Pass |
| NVNT | g | 2412 | -34.06 | <=-20 | Pass |
| NVNT | g | 2462 | -46.92 | <=-20 | Pass |
| NVNT | n20 | 2412 | -34.9 | <=-20 | Pass |
| NVNT | n20 | 2462 | -45.7 | <=-20 | Pass |











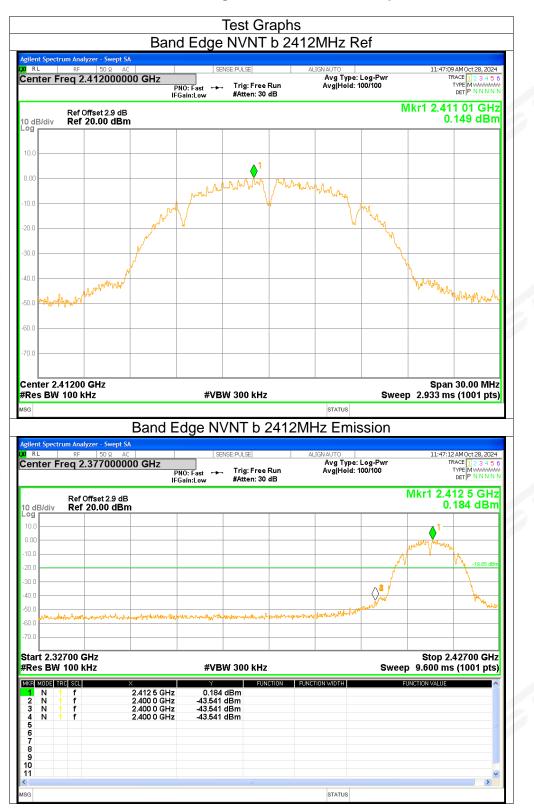








Page 62 of 78



1

6



Page 63 of 78

Band Edge NVNT b 2462MHz Ref 11:51:57 AM Oct 28, 2024 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N N B L Center Freq 2.462000000 GHz Avg Type: Log-Pw Avg|Hold: 100/100 Trig: Free Run #Atten: 30 dB PNO: Fast ↔↔ IFGain:Low Mkr1 2.462 51 GHz Ref Offset 2.85 dB Ref 20.00 dBm 0.528 dBm 10 dB/div **≬**¹ 0.0 Mah M 20.0 30. 40 r warm տրվ MW Wympowell Spart 50.0 60. Center 2.46200 GHz Span 30.00 MHz #VBW 300 kHz Sweep 2.933 ms (1001 pts) #Res BW 100 kHz ISG STATUS Band Edge NVNT b 2462MHz Emission gilent Spectrum Analyzer - Swept SA 11:52:00 AMOct 28, 2024 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N R L Center Freq 2.497000000 GHz Avg Type: Log-Pwi Avg|Hold: 100/100 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.461 5 GHz Ref Offset 2.85 dB Ref 20.00 dBm 0.392 dBm 10 dB/div 0.0 20. 30.0 -40.0 $\langle \rangle$ Δ^2 $\langle \rangle$ 50. -60.0 Start 2.44700 GHz Stop 2.54700 GHz #VBW 300 kHz #Res BW 100 kHz Sweep 9.600 ms (1001 pts) MKR MODE TRC SCL FUNCTION ' ION VALUE 2.461 5 GHz 2.483 5 GHz 2.500 0 GHz 2.491 3 GHz 0.392 dBm -54.629 dBm -53.344 dBm -50.542 dBm N N N 2 3 4 5 6 7 8 9 10 11 STATUS SG



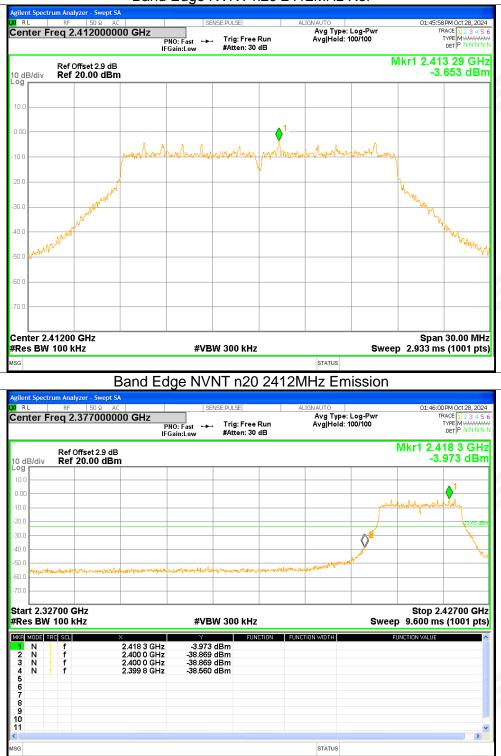
Band Edge NVNT g 2412MHz Ref 11:55:42 AM Oct 28, 2024 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N N B L Center Freq 2.412000000 GHz Avg Type: Log-Pw Avg|Hold: 100/100 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.413 29 GHz Ref Offset 2.9 dB Ref 20.00 dBm -3.665 dBm 10 dB/div 0.0 when have mump 20.0 May 30. 40 r Anton 50.0 60. Center 2.41200 GHz Span 30.00 MHz #VBW 300 kHz Sweep 2.933 ms (1001 pts) #Res BW 100 kHz ISG STATUS Band Edge NVNT g 2412MHz Emission ilent Spectrum Analyzer - Swept SA R L 11:55:45 AM Oct 28, 2 Center Freq 2.377000000 GHz TYPE MWWWWW DET P N N N N Avg Type: Log-Pwi Avg|Hold: 100/100 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.419 5 GHz Ref Offset 2.9 dB -4.014 dBm 10 dB/div Ref 20.00 dBm 0.0 . 30.0 $\langle \rangle$ -40.0 Start 2.32700 GHz Stop 2.42700 GHz #VBW 300 kHz #Res BW 100 kHz Sweep 9.600 ms (1001 pts) MKR MODE TRC SCL FUNCTION TION VALUE -4.014 dBm -37.726 dBm -37.726 dBm -37.726 dBm 2.419 5 GHz 2.400 0 GHz 2.400 0 GHz 2.400 0 GHz 2.400 0 GHz N N N 2 3 4 5 6 7 8 9 10 11 STATUS SG



Band Edge NVNT g 2462MHz Ref D1:41:48 PM Oct 28, 2024 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N B L Center Freq 2.462000000 GHz Avg Type: Log-Pw Avg|Hold: 100/100 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.464 52 GHz Ref Offset 2.85 dB Ref 20.00 dBm -3.662 dBm 10 dB/div 0.0 wigmth Mamberry moundmentante whyth 20.0 Uhy 30. 4N (MM 50.0 60. Center 2.46200 GHz Span 30.00 MHz #VBW 300 kHz Sweep 2.933 ms (1001 pts) #Res BW 100 kHz ISG STATUS Band Edge NVNT g 2462MHz Emission gilent Spectrum Analyzer - Swept SA 01:41:51 PM Oct 28, 2024 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N R L Center Freq 2.497000000 GHz Avg Type: Log-Pwi Avg|Hold: 100/100 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.469 6 GHz Ref Offset 2.85 dB Ref 20.00 dBm -3.829 dBm 10 dB/div 0.0 Ander palasta 10.0 30.0 -40.0 Ø $\langle \rangle$ -60.0 Start 2.44700 GHz Stop 2.54700 GHz #VBW 300 kHz #Res BW 100 kHz Sweep 9.600 ms (1001 pts) MKR MODE TRC SCL FUNCTION ION VALUE 2.469 6 GHz 2.483 5 GHz 2.500 0 GHz 2.484 0 GHz -3.829 dBm N N N -53.156 dBm -52.266 dBm -50.589 dBm 2 3 4 5 6 7 8 9 10 11 STATUS SG

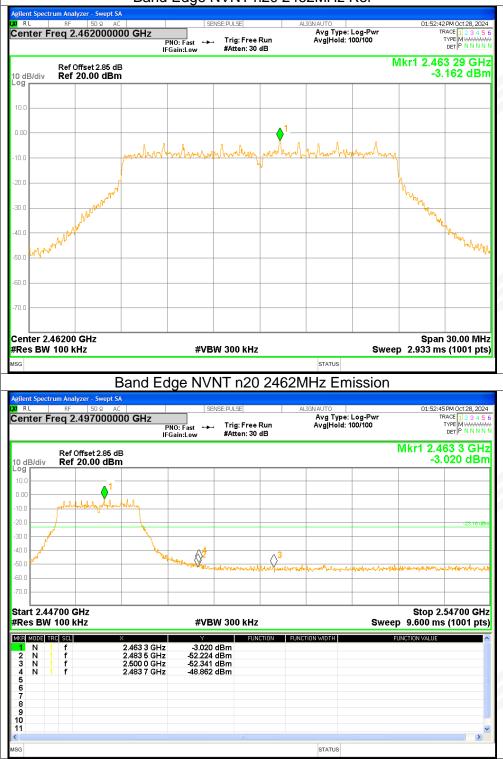


Band Edge NVNT n20 2412MHz Ref





Band Edge NVNT n20 2462MHz Ref



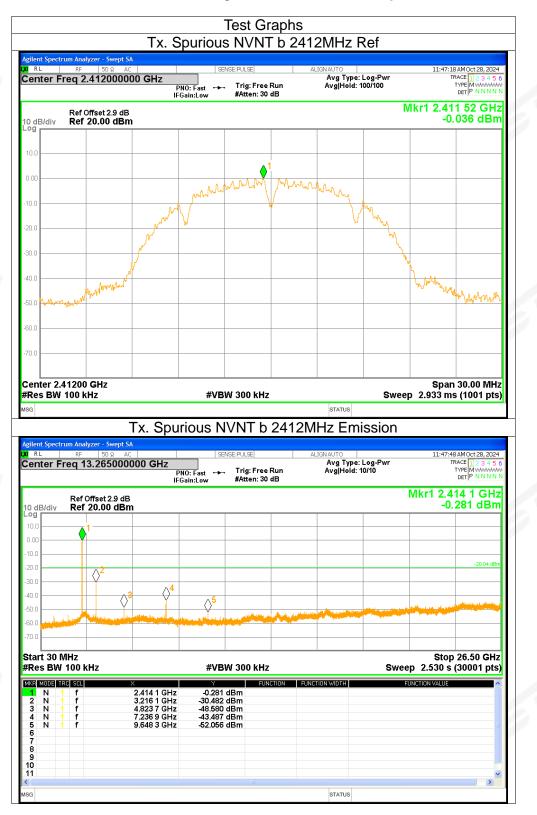


7. Conducted RF Spurious Emission

| Condition | Mode | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|-----------------|-------------|---------|
| NVNT | b | 2412 | -30.44 | <=-20 | Pass |
| NVNT | b | 2437 | -32.12 | <=-20 | Pass |
| NVNT | b | 2462 | -32.67 | <=-20 | Pass |
| NVNT | g | 2412 | -26.61 | <=-20 | Pass |
| NVNT | g | 2437 | -27.61 | <=-20 | Pass |
| NVNT | g | 2462 | -28.41 | <=-20 | Pass |
| NVNT | n20 | 2412 | -26.44 | <=-20 | Pass |
| NVNT | n20 | 2437 | -27.54 | <=-20 | Pass |
| NVNT | n20 | 2462 | -28.24 | <=-20 | Pass |



Page 69 of 78





| ilent Spectrum Analyzer RL RF S enter Freq 2.437 | 50 Ω AC | SENSE:PULSE | | ALIGNAUTO Avg Type: L | og-Pwr | 11:50:0 T | 4 AM Oct 28, 2024 RACE 1 2 3 4 5 6 |
|---|--|--|--------------------|---|------------------------|--|---|
| 211101 1109 2.431 | | | ree Run : 30 dB | Avg Hold: 10 | 0/100 | | DET P N N N N N |
| Ref Offse dB/div Ref 20.0 | | | | | M | | 7 48 GHz 433 dBm |
| | | | | | | | |
| .0 | | | ▲1 | | | | |
| 00 | | whender | W John | whenhow | | | |
| .0 | | wh (| | | V. | | |
| .0 | | W | | V | What has | | |
| .0 | | | | | "\ \ | | |
| .0 | | | | | ١ | h | |
| .0 .0 and palage book of the W | w Yunghy | | | | | July www.pl | nulpower |
| | | | | | | | |
| .0 | | | | | | | |
| .0 | | | | | | | |
| enter 2.43700 GH | - | | | | | | 20.00 MU- |
| THE 2.43700 GH | | | | | | | |
| es BW 100 kHz | - | #VBW 300 I | Hz | | Sweep | | s (1001 pts) |
| | - | #VBW 300 I | (Hz | STATUS | Sweep | | |
| | | #vew 300 I | | | · | | |
| ent Spectrum Analyzer RL RF 5 | Тх. Sp Swept SA 50 Ω AC | | | MHz Emis | ssion | 2.933 m 11:50:3 | s (1001 pts) |
| ent Spectrum Analyzer RL RF 5 | Тх. Sp Swept SA 50 Ω AC | | | MHz Emi | SSION | 2.933 m 11:50:3 | s (1001 pts) |
| ent Spectrum Analyzer - RL RF 5 | Тх. Sp Swept SA S0 Ω AC 55000000 GHz | | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | SAMOCT 28,2024 RACE 123456 TYPE MUMANNA DET P N N N N 38 8 GHz |
| ent Spectrum Analyzer RL RF S enter Freq 13.20 Ref Offse dB/div Ref 20.0 | Tx. Sp Swept SA 55000000 GHz t2.88 dB | | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | 5AMOct 28, 2024 RACE 1 2 3 4 5 6 TYPE M WWW DET P N N N N N |
| ent Spectrum Analyzer RL RF S enter Freq 13.20 B/div Ref Offse | Tx. Sp Swept SA 55000000 GHz t2.88 dB | | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | SAMOCT 28,2024 RACE 123456 TYPE MUMANNA DET P N N N N 38 8 GHz |
| ent Spectrum Analyzer RL RF Senter Freq 13.20 B/div Ref 20.0 9 0 0 0 0 | Tx. Sp Swept SA 55000000 GHz t2.88 dB | | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | s (1001 pts) |
| ent Spectrum Analyzer RL RF S enter Freq 13.20 B/div Ref 20.0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | PNO: Fast ++ Trig: F IFGain:Low + #Atter | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | SAMOCT 28,2024 RACE 123456 TYPE MUMANNA DET P N N N N 38 8 GHz |
| ent Spectrum Analyzer RL RF S enter Freq 13.20 B/div Ref 20.0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | s (1001 pts) |
| ent Spectrum Analyzer RL RF Senter Freq 13.20 B/div Ref 20.0 G/div Ref 20.0 C C C C C C C C C C C C C C C C C C C | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | PNO: Fast ++ Trig: F IFGain:Low #Atter | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | s (1001 pts) |
| ent Spectrum Analyzer RL RF S enter Freq 13.26 B/div Ref 20.6 9 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | PNO: Fast ++ Trig: F IFGain:Low #Atter | b 2437 | MHz Emis | SSION og-Pwr /10 |) 2.933 m 11:50:3 T Wkr1 2.4 | s (1001 pts) |
| ent Spectrum Analyzer RL RF Sector Ref Offse dB/div Ref 20.0 GB/div Ref | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | PNO: Fast \rightarrow Trig: F IFGain:Low \rightarrow Trig: C #Atter | b 2437 | MHz Emis | og-Pwr /10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. | SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm |
| RE Spectrum Analyzer RL RF S enter Freq 13.26 B/div Ref 20.6 C Ref Offse Ref Offse Ref Offse C Ref Offse C Ref 20.6 C Ref | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm | PNO: Fast \rightarrow Trig: F IFGain:Low \rightarrow Trig: F 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | b 2437 | MHz Emis | og-Pwr //10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. | SAMOC128,2024 RACE [1 2 3 4 5 6 PNN NN N DET PNN NN N 38 8 GHz 055 dBm |
| ent Spectrum Analyzer RL RF Sectrum Analyzer RL RF Sectrum Analyzer Ref Offse Briter Freq 13.26 Ref Offse Ref Offse Ref Offse art 30 MHz Res BW 100 kHz Ref Diffse Ref Offse Ref Ref Ref Ref Ref Ref Ref Ref Ref Ref | Tx. Sp | PNO: Fast Trig: F PNO: Fast Trig: F IFGain: Low Trig: F #Atter 4 4 4 4 4 4 4 4 4 4 4 4 4 | b 2437 | ALIGN AUTO Avg Type: L Avg Hold: 10 | og-Pwr //10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. Vkr1 2.4 -0. Stop p 2.530 s | SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm |
| Ient Spectrum Analyzer RL RF RL RF Senter Freq 13.26 dB/div Ref Offse dB/div Ref 20.0 9 1 00 1 1 1 <td>Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm 2 2 2 2 2 2 2 2 2 4 3 4 8 6 3.249 6 6 - 4.874 0 6 - 7.312 8 6 - 7.312 6 6 - 7.312 6 - 7.312 - 7.3</td> <td>PN0: Fast → Trig: F PN0: Fast → Trig: F IFGain:Low → #Atter #Atter 4 4 4 4 4 4 4 4 4 4 4 4 4</td> <td>b 2437</td> <td>ALIGN AUTO Avg Type: L Avg Hold: 10</td> <td>og-Pwr //10</td> <td>2.933 m 11:50:3 T Wkr1 2.4 -0. Vkr1 2.4 -0. Stop p 2.530 s</td> <td>SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm</td> | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm 2 2 2 2 2 2 2 2 2 4 3 4 8 6 3.249 6 6 - 4.874 0 6 - 7.312 8 6 - 7.312 6 6 - 7.312 6 - 7.312 - 7.3 | PN0: Fast → Trig: F PN0: Fast → Trig: F IFGain:Low → #Atter #Atter 4 4 4 4 4 4 4 4 4 4 4 4 4 | b 2437 | ALIGN AUTO Avg Type: L Avg Hold: 10 | og-Pwr //10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. Vkr1 2.4 -0. Stop p 2.530 s | SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm |
| Ref Offse dB/div Ref 20.0 Ref 20.0 | Tx. Sp Swept SA 35000000 GHz t2.88 dB 10 dBm 2 2 2 2 2 2 2 2 2 2 2 2 2 | PN0: Fast → Trig: F PN0: Fast → Trig: F IFGain:Low → #Atter #Atter 4 4 4 4 4 4 4 4 4 4 4 4 4 | b 2437 | ALIGN AUTO Avg Type: L Avg Hold: 10 | og-Pwr //10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. Vkr1 2.4 -0. Stop p 2.530 s | SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm |
| Ient Spectrum Analyzer RL RF S enter Freq 13.26 Ref Offse G dB/div Ref 20.0 G 90 9 9 9 100 9 9 9 100 9 9 9 100 9 9 9 100 9 9 9 100 9 9 9 9 100 9 9 9 9 9 100 | Tx. Sp Swept SA 30 Q AC 55000000 GHz t2.88 dB 10 dBm 2 2 2 2 2 2 2 2 2 4 3 4 8 6 3.249 6 6 - 4.874 0 6 - 7.312 8 6 - 7.312 6 6 - 7.312 6 - 7.312 - 7.3 | PN0: Fast → Trig: F PN0: Fast → Trig: F IFGain:Low → #Atter #Atter 4 4 4 4 4 4 4 4 4 4 4 4 4 | b 2437 | ALIGN AUTO Avg Type: L Avg Hold: 10 | og-Pwr //10 | 2.933 m 11:50:3 T Wkr1 2.4 -0. Vkr1 2.4 -0. Stop p 2.530 s | SAMOC128,2024 RACE 12.3.4.5.6 UP N N N N 38 8 GHz 055 dBm -19.57 dBm -19.57 dBm |



| RL RF Senter Freq 2.462 | PN | SENSE:PULSE IO: Fast ↔ Trig: Fr iain: I ow #Atten: | eeRun Avg | ○ Type: Log-Pwr Hold: 100/100 | 11:52:06 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P N N N N N |
|--|--|---|--------------------------------------|--|--|
| Ref Offset | 2.85 dB | iain:Low #Atten: | 30 dB | M | lkr1 2.462 51 GHz |
| dB/div Ref 20.0 | 0 dBm | | | | 0.601 dBm |
| 0 | | | | | |
| 0 | | - A N II. | | | |
| | | pohlandarit | Mahahaha | Ind | |
| | a for the second | | | V | |
| | M | | | - V | |
|) | | | | - ¹ | |
| • • • • • • • • • • • • • • • • • • • | prthod | | | | Mathework When when a start when when when when when when when when |
| D popularion | | | | | Mr. W.W. War |
| | | | | | |
| | | | | | |
| | | | | | |
| nter 2.46200 GH es BW 100 kHz | Z | #VBW 300 k | Hz | Sweep | Span 30.00 MHz 2.933 ms (1001 pts) |
| | | | | | |
| | | | STA | TUS | |
| | Tx. Spur | ious NVNT | b 2462MHz | | |
| | Swept SA | | b 2462MHz | Emission | 11:52:27.4M.Oct-29, 2024 |
| RL RF S | Swept SA 50 Ω AC 5000000 GHz | SENSE:PULSE | b 2462MHz Alignaut Pee Run Avg | Emission | 11:52:37.AMOct.28,2024 TRACE 22345 5 TYPE MWWWWW |
| nter Freq 13.26 | Swept SA ତେନ୍ଦ୍ର କଟ SSO00000 GHz PN IFG | SENSE:PULSE | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 1 2 3 4 5 6 TYPE M WWWW DET P N N N N N |
| RL RF S nter Freq 13.20 Ref Offse dB/div Ref 20.0 | Swept SA 50 Q AC 55000000 GHz PN IFG t 2.85 dB | SENSE:PULSE IO: Fast ↔ Trig: Fr | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 1 2 3 4 5 6 TYPE M WWWWW |
| RL RF 13.20 nter Freq 13.20 Ref Offse dB/div Ref 20.0 | Swept SA 50 Q AC 55000000 GHz PN IFG t 2.85 dB | SENSE:PULSE IO: Fast ↔ Trig: Fr | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 123456 TYPE MWWWW DET PNNNN Vkr1 2.461 7 GHz |
| RL RF 13.20 Ref Freq 13.20 Ref Offse dB/div Ref 20.0 | Swept SA 50 Q AC 55000000 GHz PN IFG t 2.85 dB | SENSE:PULSE IO: Fast ↔ Trig: Fr | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 1123456 TYPE MWWWWWW DEIPNNNN Vkr1 2.461 7 GHz 0.170 dBm |
| RL RF Freq 13.26 | Swept SA 30 Q AC 35000000 GHz PN IFG 12.85 dB 10 dBm | SENSE:PULSE IO: Fast ↔ Trig: Fr | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 123456 TYPE MWWWW DET PNNNN Vkr1 2.461 7 GHz |
| Ref Offse dB/div Ref 20.0 | Swept SA 30 Q AC 35000000 GHz PN IFG 12.85 dB 10 dBm | SENSE:PULSE IO: Fast ↔ Trig: Fr | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE 1123456 TYPE MWWWWWW DEIPNNNN Vkr1 2.461 7 GHz 0.170 dBm |
| RL RF Freq 13.20 | Swept SA 30 Q AC 35000000 GHz PN IFG 12.85 dB 10 dBm | SENSE:PULSE IO: Fast Trig: Fr ain:Low #Atten: | b 2462MHz Alignaut Pee Run Avg | Emission Type: Log-Pwr Hold: 10/10 | TRACE [] 23 4 5 6 TYPE MWWWW DET P NN NN Wkr1 2.461 7 GHz 0.170 dBm |
| RL RF Freq 13.20 | Swept SA 30 Q AC 35000000 GHz PN IFG 12.85 dB 10 dBm | SENSE:PULSE IO: Fast Trig: Fr ain:Low #Atten: | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [] 23 4 5 6 TYPE MWWWW DET P NN NN Wkr1 2.461 7 GHz 0.170 dBm |
| RL RF (13.26 Ref Offse dB/div Ref 20.0 dB/div Ref 20.0 | Swept SA 30 Q AC 35000000 GHz PN IFG 12.85 dB 10 dBm | SENSE:PULSE 10: Fast → Trig: Fr ain:Low #Atten: | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [] (23 4 5 6 6 TYPE MANAWAY DET P NNNN VIkr1 2.461 7 GHz 0.170 dBm |
| RL RF 13.20 Ref Offse BB/div Ref 20.0 Ref 2 | Swept SA 30 2 AC P 55000000 GHz P P 1FG 12.85 dB 00 dBm 4 4 4 4 4 4 4 4 4 4 4 4 4 | SENSE:PULSE IO: Fast Trig: Fr ain:Low #Atten: 5 5 5 4 VBW 300 kl | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | 1940 E 123 4 5 6 TYPE MANANANA DET P NNNN Mkr1 2.461 7 GHz 0.170 dBm |
| RL RF Content of the second se | Swept SA 30 Q AC 35000000 GHz PP IFG t 2.85 dB 00 dBm 2 4 4 2.461 7 GHz 3.282 3 GHz | SENSE:PULSE 10: Fast → Trig: Fr ain:Low #Atten: 5 5 #VBW 300 k × 0.170 dBm -32.079 dBm | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [12345.6 TYPE MANAWAY DET P NNNN Mkr1 2.461 7 GHz 0.170 dBm -1940.65m -1940.65m Stop 26.50 GHz p 2.530 s (30001 pts) |
| RL RF Freq 13.26 Ref Offse B/div Ref 20.0 Ref 20.0 R | Swept SA 30 Q AC 35000000 GHz PP IFG t2.85 dB 10 dBm 4 2 4 4 4 4 4 4 4 4 4 4 4 5 2 4 4 4 4 4 4 4 4 4 4 4 4 4 | SENSE:PULSE 10: Fast → Trig: Fr ain:Low → #Atten: #VBW 300 k *VBW 300 k × 0.170 dBm -32.079 dBm -31.396 dBm -44.585 dBm | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [12345.6 TYPE MANAWAY DET P NNNN Mkr1 2.461 7 GHz 0.170 dBm -1940.66n -1940.66n Stop 26.50 GHz p 2.530 s (30001 pts) |
| RL RF Freq 13.26 | Swept SA 50 Q AC 55000000 GHz PN IFG t2.85 dB 10 dBm 2 4 2 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 | SENSE:PULSE 10: Fast → Trig: Fr ain:Low → #Atten: | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [12345.6 TYPE MANAWAY DET P NNNN Mkr1 2.461 7 GHz 0.170 dBm -1940.66n -1940.66n Stop 26.50 GHz p 2.530 s (30001 pts) |
| RL RF 0150 Ref Offse Ref Offse | Swept SA 30 Q AC 35000000 GHz PP IFG t2.85 dB 10 dBm 4 2 4 4 4 4 4 4 4 4 4 4 4 5 2 4 4 4 4 4 4 4 4 4 4 4 4 4 | SENSE:PULSE 10: Fast → Trig: Fr ain:Low → #Atten: #VBW 300 k *VBW 300 k × 0.170 dBm -32.079 dBm -31.396 dBm -44.585 dBm | b 2462MHz | Emission Type: Log-Pwr Hold: 10/10 | TRACE [12345.6 TYPE MANAWAY DET P NNNN Mkr1 2.461 7 GHz 0.170 dBm -1940.66n -1940.66n Stop 26.50 GHz p 2.530 s (30001 pts) |



| ilent Spectrum Analyzer - Sw RL RF 50Ω | P AC | SENSE:PULSE | ALIGNAUTO | | | . AM Oct 28, 2024 |
|--|--|--|--|--------------------------------|----------------------|--|
| enter Freq 2.41200 | PN | NO: Fast ++ Trig: Fr Gain:Low #Atten: | eeRun Avg ⊢ | Type: Log-Pwr Iold: 100/100 | TF | ACE 123456 TYPE MWWWWW DET PNNNNN |
| Ref Offset 2. dB/div Ref 20.00 (| | | | | Mkr1 2.41 -3. | 3 29 GHz 668 dBm |
| | | | | | | |
| .0 | | | . 1 | | | |
| | . Marshall | whentroman | | hamaly | | |
| .0 | | w.h. whey when while w | AND MARCHINE AND | N - AND MALARY | | |
| .0 | area | | | <u> </u> | hyper . | |
| 1.0 | VII. | | | | - What when | |
| 1.0 | | | | | N | Multiple |
| .0 prover with an | | | | | | - WWWWWW |
| .0 | | | | | | |
| .0 | | | | | | |
| | | | | | | |
| enter 2.41200 GHz es BW 100 kHz | | #VBW 300 ki | Hz | Swee | Span 2.933 ms | 30.00 MHz (1001 pts) |
| i | | | | | - | |
| | | | STAT | us | | |
| | Tx. Spur | rious NVNT | g 2412MHz E | | | |
| | | rious NVNT | g 2412MHz E | Emission | 11:56:50 | 1AM Oct 28, 2024 |
| RL RF 50 Ω | rept SA 2 AC 000000 GHz PN | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission | 11:56:50 Тг | JAM Oct 28, 2024 RACE 1 2 3 4 5 6 TYPE M WANN M DET P N N N N N |
| RL RF 50 Ω enter Freq 13.2650 Ref Offset 2. | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 50 Ω enter Freq 13.2650 Ref Offset 2. dB/div Ref 20.00 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | ACE 123456 TYPE MWWWWW DET PNNNNN |
| RL RF 50 Ω enter Freq 13.2650 dB/div Ref 0ffset 2, g 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 50 2 Parter Freq 13.2650 Briter Freq 13.2650 Ref Offset 2: Ref 20.00 1 1 1 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 50 2 enter Freq 13.2650 dB/div Ref 20.00 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 502 enter Freq 13.2650 dB/div Ref 20.00 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 50.2 enter Freq 13.2650 Ref Offset2. dB/div Ref 20.00 9 0 1 1 00 1 1 00 2 1 00 1 2 00 2 1 00 2 1 00 2 1 00 2 1 00 2 1 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E Alignauto Avg ee Run Avgl | Emission Type: Log-Pwr | Mkr1 2.4 | |
| RL RF 502 enter Freq 13.2650 | 2 AC 000000 GHz PN IFG 9 dB | SENSE:PULSE | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | T Nkr1 2.4 -3. | 26.50 GHz |
| RL RF 50.2 enter Freq 13.2650 Ref Offset 2. dB/div Ref 20.00 9 9 1 1 10 1 1 < | AC ODDOOD GHZ PROFILES | SENSE:PULSE 10: Fast - Trig: Fr Sain:Low #Atten: | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | Mkr1 2.4 -3. | 26.50 GHz |
| RL RF 50.2 Enter Freq 13.2650 Ref Offset 2. dB/div Ref 20.00 1 0 1 1 0 2 1 0 2 1 0 2 1 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 3 0 2 3 0 3 4 0 4 4 0 4 4 0 4 4 1 5 4 | X X 2.418 5 GHz 3.216 1 GHz | SENSE:PULSE 10: Fast → Trig: Fr pain:Low #Atten: 5 5 #VBW 300 kl 3.982 dBm | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | ™ Mkr1 2.4 -3. | 26.50 GHz |
| RL RF 50.2 Enter Freq 13.2650 Ref Offset 2. dB/div Ref 20.00 1 00 1 1 00 1 1 00 2 1 00 1 1 00 2 2 00 2 2 00 1 1 00 1 1 00 1 1 00 1 1 00 1 1 00 1 1 00 1 1 | AC 000000 GHz PP IFG 9 dB dBm 000000 GHz 200000 GHz PP 1FG 9 dB 200000 GHz 200000 GHz 1FG 9 dB 2000000 GHZ 1FG 9 dB 20000000 GHZ 1FG 9 dB 2000000 GHZ 1FG 9 dB 200000000000 GHZ 1FG 9 dB 200000000000000000000000000000000000 | SENSE PULSE IO: Fast Trig: Fr Jain:Low #Atten: | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | ™ Mkr1 2.4 -3. | 26.50 GHz |
| RL RF 50.2 Enter Freq 13.2650 Ref Offset 2. dB/div Ref 20.00 00 1 00 2 1 1 1 1 1 1 1 1 2 1 3 1 | X AC PP 000000 GHz PP IFG 9 dB dBm IFG 9 dB dBm IFG 2.418 5 GHz 3.216 1 GHz 3.216 1 GHz 4.947 2 GHz 7.227 2 GHz IFZ | SENSE:PULSE 10: Fast → Trig: Fr pain:Low → #Atten: | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | ™ Mkr1 2.4 -3. | 26.50 GHz |
| Ref Offset 2: Ref Offset 2: Ref Offset 2: Ref 20.00 | X AC PP 000000 GHz PP IFG 9 dB dBm IFG 9 dB dBm IFG 2.418 5 GHz 3.216 1 GHz 3.216 1 GHz 4.947 2 GHz 7.227 2 GHz IFZ | SENSE:PULSE 10: Fast → Trig: Fr pain:Low → #Atten: | g 2412MHz E | Type: Log-Pwr Iold: 20/20 | ™ Mkr1 2.4 -3. | 26.50 GHz |



| lent Spectrum Analyze | | | | | | 1 50 00 1110 100 0001 |
|---|--|---|--|--|--------------------|--|
| RL RF enter Freq 2.43 | 50 Ω AC 37000000 GHz | | rig: Free Run Atten: 30 dB | ALIGN AUTO Avg Type: Log- Avg Hold: 100/10 | Pwr | L1:58:09 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N |
| dB/div Ref 20 | et 2.88 dB .00 dBm | | | | Mkr1 : | 2.443 30 GHz -3.889 dBm |
| g | | | | | | |
| .0 | | | | | | |
| 10 | | | | 1 | | |
| | Λ | August - August | h | an hundrand work | | |
| .0 | | w lo he we were the | WWWW WWW | ניערי היולייא מוילה הארמיו או נמל. | ANAN - | |
| .0 | | | | | <u> </u> | |
| | and the second s | | | | Many | |
| 0. | N | | | | | WI. |
| // | | | | | | N Mary |
| .0 .0 Lyphilwanto | | | | | | Mar Marker |
| | | | | | | |
| .0 | | | | | | |
| .0 | | | | | | |
| | | | | | | |
| nter 2.43700 G es BW 100 kHz | | #VBW 3 | | | Sweep 2.93 | Span 30.00 MHz 33 ms (1001 pts) |
| es BW 100 kHz ent Spectrum Analyze RL RF | Tx. Sp | | NT g 243 [.] | 7MHz Emiss | Sweep 2.93 SiON | 33 ms (1001 pts) |
| es BW 100 kHz ent Spectrum Analyze RL RF inter Freq 13.2 | Tx. Sp - Swept SA 50 Ω 2650000000 GHz | | NT g 243 | 7MHz Emiss | Sweep 2.93 | 33 ms (1001 pts) 11:58:40 AMOct 28, 2024 TRACE 1 2 3 4 5 6 TYPE M WWWW DET P N N N N |
| es BW 100 kHz ent Spectrum Analyze RL RF nter Freq 13.2 Ref Offs dB/div Ref 20 | Τχ. Sp - Swept SA 50 Ω AC | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AMOct 28, 2024 TRACE 1 2 3 4 5 6 TYPE Musanumber |
| es BW 100 kHz ent Spectrum Analyze RL RF inter Freq 13.2 Ref Offs dB/div Ref 20 | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz ent Spectrum Analyze RL RF inter Freq 13.2 Ref Offs dB/div Ref 20 | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 50 0 AC 265000000 GHz ret 2.88 dB | | NT g 243 ME | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz | Tx. Sp - Swept SA 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz 265000000 GHz | | NT g 243 USE irig: Free Run Atten: 30 dB | 7MHz Emiss | Sweep 2.93 | 11:58:40 AM Oct 28, 2024 TRACE 1 2 3 4 5 6 туре Миминин 0ет Р N N N N 2.433 5 GHz |
| es BW 100 kHz ent Spectrum Analyze RL RF nter Freq 13.2 Ref Offs dB/div Ref 20 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp - Swept SA 265000000 GHz 265000000 GHz 26500000 GHz 26500000 GHz 26500000 GHz 26500000 GHz 2650000 GHz 2650000 GHZ 2650000 GHZ 2650000 GHZ 265000 GHZ 26500 GHZ 2650 | PNO: Fast T IFGain:Low T #VBW 3 | NT g 243 Trig: Free Run Atten: 30 dB | 7MHz Emiss | Sweep 2.93 | 11:58:40 AMOCT 28, 2024 TRACE 1 2 3 4 5 6 TYPE I 2 5 7 TYPE I 2 5 7 |
| es BW 100 kHz | Tx. Sp - Swept SA 50 2 AC 265000000 GHz et 2.88 dB .00 dBm 2 2 2 2 2 2 2 2 3 4 4 5 5 4 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 | PNO: Fast PNO: Fast IFGain:Low #VBW 3 #VBW 3 | NT g 243 USE rig: Free Run Atten: 30 dB | ALIGNAUTO Avg Type: Log- Avg Hold: 10/10 | Sweep 2.93 | 11:58:40 AMOCT 28, 2024 TRACE 1 2 3 4 5 6 TYPE I 2 5 7 TYPE I 2 5 7 |
| es BW 100 kHz ent Spectrum Analyze RL RF inter Freq 13.2 Ref Offs dB/div Ref 20 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp - Swept SA 265000000 GHz 265000000 GHz 26500 GHZ 265000000 GHZ 26500 GHZ 26500 GHZ 26500000 GHZ 26500 G | PNO: Fast - T PNO: Fast - T IFGain:Low # # # # # # # # # # # # # # | NT g 243 USE rig: Free Run Atten: 30 dB | ALIGNAUTO Avg Type: Log- Avg Hold: 10/10 | Sweep 2.93 | 11:58:40 AMOCT 28, 2024 TRACE 1 2 3 4 5 6 TYPE I 2 5 7 TYPE I 2 5 7 |
| es BW 100 kHz ent Spectrum Analyze RL RF inter Freq 13.2 Ref Offs dB/div Ref 20 0 0 0 0 0 0 0 0 0 0 0 0 0 | Tx. Sp - Swept SA - So 2 AC - 265000000 GHz - 26500000 GHz - 2650000 GHz - 26500000 GHz - 26500000 GHz - 265000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 26500000000 GHZ - 265000000000000000000000000000000000000 | PNO: Fast - T PNO: Fast - T IFGain:Low # # # # # # # # # # # # # # | NT g 243 USE rig: Free Run Atten: 30 dB | ALIGNAUTO Avg Type: Log- Avg Hold: 10/10 | Sweep 2.93 | 11:58:40 AMOCT 28, 2024 TRACE 1 2 3 4 5 6 TYPE I 2 5 7 TYPE I 2 5 7 |
| es BW 100 kHz ent Spectrum Analyze RL RF enter Freq 13.2 Ref Offs dB/div Ref 20 G G G G G G G G G G G G G G G G G G | Tx. Sp - Swept SA - So 2 AC - 265000000 GHz - 26500000 GHz - 2650000 GHz - 26500000 GHz - 26500000 GHz - 265000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 2650000000 GHZ - 26500000000 GHZ - 265000000000000000000000000000000000000 | PNO: Fast - T PNO: Fast - T IFGain:Low # # # # # # # # # # # # # # | NT g 243 USE rig: Free Run Atten: 30 dB | ALIGNAUTO Avg Type: Log- Avg Hold: 10/10 | Sweep 2.93 | 11:58:40 AMOCt 28, 2024 ТКАСЕ 2:3:4:56 ТУРЕС 1:2:3:4:56 ТУРЕС 1:2:3:56 ТУРЕС 1:3:56 ТУРЕС |



| RF 50 Ω AC | | | | | | | |
|------------------------------------|--|---|--|---|-------------------------------------|--|-----------------------------|
| q 2.4620000 | 00 GHz | | PULSE Frig: Free Run (Atten: 30 dB | ALIGNAUTO Avg Type: Lo Avg Hold: 100 | | 01:41:57 PM Oct 2 TRACE 1 TYPE M DET P | 3456 |
| | | | | | Mk | | |
| | | | | | | | |
| | | | | | .1 | | |
| | 6 A | Andre A. m. | a che a mattrad | a she who were sur | lands . | | |
| | | ALC Y YOUNG P MEMORY | W | the weather of the second s | | | |
| | M | | | | | А. | |
| NY MINANNY | | | | | | " We way he was a second a sec | _ |
| | | | | | | "VI WWW | Underson of the |
| <u> </u> | | | | | | | ່ "ທູ _່ ນ |
| | | | | | | | _ |
| | | | | | | | |
| | | | | | | | |
| 200 GHz)0 kHz | | #VBW 3 | 300 kHz | | Sweep | | |
| | | | | STATUS | | | |
| | Tx. Spu | rious NVI | NT g 246 | 2MHz Emis | sion | | |
| RF 50 Ω AC | - | SENSE:F | PULSE | ALIGNAUTO | _ | 01:42:28 PM Oct 2 | 8, 2024 |
| q 13.265000 | F | PNO: Fast ↔ T Gain:Low # | ſrig: Free Run !Atten: 30 dB | Avg Type: Lo Avg Hold: 10/ | g-Pwr 10 | TRACE 1 2 | |
| | | | | | | DET P | 3456 |
| Ref Offset 2.85 di | | | | | М | kr1 2.455 5 | GHz |
| Ref Offset 2.85 d Ref 20.00 dBn | | | | | M | DET | GHz |
| | | | | | M | kr1 2.455 5 | GHz |
| | | | | | M | kr1 2.455 5 -4.028 (| GHz |
| | | | | | M | kr1 2.455 5 -4.028 (| GHz |
| | | | | | M | kr1 2.455 5 -4.028 (| GHz |
| | | 5 | | | M | kr1 2.455 5 -4.028 (| GHz |
| Ref 20.00 dBn | | 5 5 5 | 200 kHz | | | stop 26.50 | GHz Bm |
| Ref 20.00 dBn | n 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | ↓5 #VBW 3 | FUNCTION | | Sweep | kr1 2.455 5 -4.028 (| GHz Bm |
| Ref 20.00 dBn | 8 2.455 5 GHz 3.282 3 GHz 4.953 4 GHz | -4.028 dBr -31.902 dBr -55.179 dBr | FUNCTION m m m | | Sweep | Stop 26.50 2.530 s (3000 | GHz Bm |
| Ref 20.00 dBn | n 3 4 2.456 5 GHz 3.282 3 GHz | -4.028 dBr -31.902 dBr -55.179 dBr -50.840 dBr | FUNCTION m m m m | | Sweep | Stop 26.50 2.530 s (3000 | GHz Bm |
| Ref 20.00 dBn | n 3 4 2.455 5 6 GHz 3.282 3 GHz 4.953 4 GHz 7.388 7 GHz | -4.028 dBr -31.902 dBr -55.179 dBr -50.840 dBr | FUNCTION m m m m | | Sweep | Stop 26.50 2.530 s (3000 | GHz Bm |
| | Ref 20.00 dBn | Ref Offset 2.85 dB Ref 20.00 dBm | Ref Offset 2.85 dB Ref 20.00 dBm | Ref Offset 2.85 dB Ref 20.00 dBm | Ref Offset 2.86 dB Ref 20.00 dBm | Nk Nk Ref 20.00 dBm Image: status Image: status Image: status Image: status Image: status | Mkr1 2.469 53 -3.486 |



| ilent Spectrum Analyzer - RL RF S enter Freq 2.412 | 50 Ω AC | PNO: Fast | 5E:PULSE Trig: Free Run #Atten: 30 dB | ALIGNAUTO Avg Type: Avg Hold: | : Log-Pwr 100/100 | | 6 PM Oct 28, 2024 RACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N |
|--|--|---|---|-------------------------------------|-------------------------------|---|---|
| Ref Offset dB/div Ref 20.0 | | | | | | | 3 29 GHz .710 dBm |
| | | | | | | | |
| 0.0 | | | | | | | |
| 00 | | 0 0 0 | A 0 | | | | |
| .0 | months | allegent have gladen | Mr. mar prod | H mary hary hard with | part wond was | 4 | |
| 1.0 | | | | | | <u> </u> | |
| 1.0 | Jown M | | | | | "WAY | |
| 1.0 | | | | | | <u>ل</u> ر | Lynn - A |
| 1 where WW | | | | | | | " Wan way |
|).0 f^{cw1} | | | | | | | |
| .0 | | | | | | | |
| 1.0 | | | | | | | |
| | | | | | | | |
| | Z | #VBW | V 300 kHz | | Swe | | n 30.00 MHz s (1001 pts) |
| tes BW 100 kHz | Tx. Spi | | | status 2412MHz Er | | ep 2.933 m | |
| tes BW 100 kHz | Tx. Spi | | NT n20 2 SE:PULSE Trig: Free Run | | MISSIOR | ep 2.933 m | s (1001 pts) |
| tes BW 100 kHz | Тх. Spt swept SA 55000000 GHz | | NT n20 2 | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| lent Spectrum Analyzer - RL RF 5 enter Freq 13.20 Ref Offse dB/div Ref 20.0 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer RL RF Senter Freq 13.26 dB/div Ref Offse | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer RL RF Senter Freq 13.26 Ref Offse Ref 20.0 Ref 20 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer - RL RF Senter Freq 13.20 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer - RL RF Senter Freq 13.20 Ref Offse Ref 20.0 Ref | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer - RL RF Senter Freq 13.20 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 SE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer - RL RF Senter Freq 13.20 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | PNO: Fast | NT n20 2 EE:PULSE Trig: Free Run | A12MHz Er | MISSIOR | ep 2.933 m | s (1001 pts) |
| tent Spectrum Analyzer - RL RF 5 enter Freq 13.20 Ref Offse dB/div Ref 20.0 Ref 2 | Tx. Spt Swept SA 55000000 GHz t2.9 dB | | NT n20 2 EE:PULSE Trig: Free Run | A12MHz Er | mission : Log-Pwr 20/20 | ep 2.933 m | s (1001 pts) |
| tes BW 100 kHz | Tx. Spu | PNO: Fast IFGain:Low #VBW | NT n20 2 | A12MHz Er | mission : Log-Pwr 20/20 | ep 2.933 m | s (1001 pts) |
| tes BW 100 kHz | Tx. Spu Swept SA 35000000 GHz 12.9 dB 00 dBm 2.407 0 G 3.216 1 G 3.216 1 G 4.93411 G | PNO: Fast PNO: Fast IFGain:Low #VBW #VBW Hz 4.759 d Hz -30.155 d Hz -30.526 d | NT n20 2 | ALIGNAUTO Avg Type: AvgHold: | mission : Log-Pwr 20/20 | ep 2.933 m 01:47:0 Mkr1 2.4 -4 -4 -5 | s (1001 pts) |
| Res BW 100 kHz RL RF S RL RF S Senter Freq 13.20 Ref Offse Bldiv Ref 20.0 Ref 20.0 1 Ref 20.0 1 <tr< td=""><td>Tx. Spu</td><td>Irious NVI SEME PNO: Fast IFGain:Low #VBW #VBW #Z 4.759 d Hz 4.759 d Hz 4.228 d</td><td>NT n20 2</td><td>ALIGNAUTO Avg Type: AvgHold:</td><td>mission : Log-Pwr 20/20</td><td>ep 2.933 m 01:47:0 Mkr1 2.4 -4 -4 -5 </td><td>s (1001 pts)</td></tr<> | Tx. Spu | Irious NVI SEME PNO: Fast IFGain:Low #VBW #VBW #Z 4.759 d Hz 4.759 d Hz 4.228 d | NT n20 2 | ALIGNAUTO Avg Type: AvgHold: | mission : Log-Pwr 20/20 | ep 2.933 m 01:47:0 Mkr1 2.4 -4 -4 -5 | s (1001 pts) |
| Ref Offse d dB/div Ref 20.0 Ref 2 | Tx. Spu Swept SA 5000000 GHz 12.9 dB 00 dBm 2407 0 G 3.216 1 G 4.941 1 G 7.236 0 G | Irious NVI SEME PNO: Fast IFGain:Low #VBW #VBW #Z 4.759 d Hz 4.759 d Hz 4.228 d | NT n20 2 | ALIGNAUTO Avg Type: AvgHold: | mission : Log-Pwr 20/20 | ep 2.933 m 01:47:0 Mkr1 2.4 -4 -4 -4 -5 | s (1001 pts) |



Tx. Spurious NVNT n20 2437MHz Ref 35 PM Oct 28, 2024 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N N R L Center Freq 2.437000000 GHz Avg Type: Log-Pwr Avg|Hold: 100/100 Trig: Free Run #Atten: 30 dB PNO: Fast 🔸 Mkr1 2.430 79 GHz Ref Offset 2.88 dB Ref 20.00 dBm -3.899 dBm 10 dB/div 0.0 Manly An walnum nhm 20.0 30. 40 r 50.0 60. Center 2.43700 GHz Span 30.00 MHz #VBW 300 kHz Sweep 2.933 ms (1001 pts) #Res BW 100 kHz STATUS ISG Tx. Spurious NVNT n20 2437MHz Emission ilent Spectrum Analyzer - Swept SA 01:50:37 PM Oct 28, 2 R L TRACE 1 2 3 4 5 (TYPE MWWWW DET P N N N N 1 Center Freg 13.265000000 GHz Avg Type: Log-Pwr Avg|Hold: 20/20 PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB Mkr1 2.440 5 GHz Ref Offset 2.88 dB Ref 20.00 dBm -4.712 dBm 10 dB/div 0.0 30.0 -40.0 \Diamond^{5} \ominus Start 30 MHz Stop 26.50 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.530 s (30001 pts) MKR MODE TRC SCL FUNCTION W UNCTION VALUE 2.440 5 GHz 3.249 6 GHz 5.036 4 GHz 7.308 4 GHz 9.748 0 GHz -4.712 dBm -31.441 dBm -54.865 dBm -47.599 dBm -51.872 dBm 1 2 3 4 5 6 7 8 9 10 N N N N N STATUS SG



| ilent Spectrum Analyzer - RL RF 5 enter Freq 2.462 | iOΩ AC | PNO: Fast +++ IFGain:Low | E:PULSE Trig: Free Run #Atten: 30 dB | ALIGNAUTO Avg Type: Avg Hold: 1 | Log-Pwr 00/100 | 01:52:5 | 1PM Oct 28, 2024 IRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N |
|--|--|--|--|--|-------------------|--|---|
| Ref Offset dB/div Ref 20.0 | | ii Guilleow | | | | | 8 30 GHz .595 dBm |
| g | | | | | | | |
|).0 | | | | | | | |
| 00 | | 1. 1. 1. | monting worth | monter | | | |
| 1.0 | | - Marci Dara and ma | M M M M M | AM WARN WARN MUCH | n when how | <u>v</u> | |
| 1.0 | - All | | | | | h | |
| ماليل | J ^{ent} | | | | | . WWW | |
| 1.0 MM | | | | | | | With and the set |
| DO HANNAM | | _ | | | | | *** W(W) |
| 0.0 | | _ | | | | | |
| 1.0 | | | | | | | |
| | | | | | | | |
| Res BW 100 kHz | | #VBW | 300 kHz | | Swe | | n 30.00 MHz s (1001 pts) |
| s lent Spectrum Analyzer - | Swept SA | urious NVI | NT n20 246 | | | ep 2.933 m า | s (1001 pts) |
| lent Spectrum Analyzer - RL RF 5 | Swept SA iD Ω AC | PNO: Fast | | | nissior | ep 2.933 m ງ 01:53:2 | s (1001 pts) |
| Ient Spectrum Analyzer - RL RF S Enter Freq 13.26 Ref Offse | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | S (1001 pts) |
| a RL RF S enter Freq 13.26 Ref Offse dB/div Ref 20.0 9 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Senter Freq 13.26 dB/div Ref Offse g 0 0 0 0 0 0 0 0 0 0 0 0 0 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Sectrum Analyzer RL RF Sector anter Freq 13.26 dB/div Ref Offsec dB/div Ref 20.0 g 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Sectrum Analyzer S RL RF Sector RF Sector Ref 20.0 GB/div Ref 2 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Sectrum Analyzer a RL RF Sector Ref Offsec dB/div Ref Offsec dB/div Ref 20.0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUISE Trig: Free Run | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Sectrum Analyzer a RL RF Sector Ref Offsec dB/div Ref Offsec dB/div Ref 20.0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUGE Trig: Free Run #Atten: 30 dB | 62MHz En Alignauto Avg Type: 1 | nissior | ep 2.933 m) 01:53: Mkr1 2.4 | s (1001 pts) |
| a RL RF Sectrum Analyzer S RL RF Sectrum Analyzer S Ref Offse Ref Offse Ref 20.0 9 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | Swept SA 10 Ω AC 55000000 GHz t 2.85 dB | PNO: Fast | NT n20 24(EPUGE Trig: Free Run #Atten: 30 dB | 62MHz En Alignauto Avg Type: 1 | Log-Pwr 0/10 | ep 2.933 m 01:532 Mkr1 2.4 -4 -4 -4 -5 | s (1001 pts) |
| ent Spectrum Analyzer RL RF Senter Freq 13.26 Ref Offset dB/div Ref 20.0 Ref 20.0 Ref 20.0 Ref 0ffset ref 20.0 Ref 20. | Swept SA 10 2 AC 155000000 GHz 12.85 dB 10 dBm 43 4 4457 3 GH | | NT n20 246 | 62MHz En Alignauto Avg Type: 1 | Log-Pwr 0/10 | ep 2.933 m | s (1001 pts) |
| ent Spectrum Analyzer RL RF Senter Freq 13.26 Ref Offset dB/div Ref 20.0 Ref 20.0 Ref 20.0 Ref 0ffset ref 20.0 Ref 20. | Swept SA 10 2 AC 15000000 GHz 12.85 dB 10 dBm 4 2 457 3 G 4.757 5 G 4.757 5 G 7.386 0 G | Jrious NVI SEMS PNO: Fast FGain:Low #VBW #VBW #2 4.686 dll Hz -4.686 dll Hz -54.761 dll Hz -54.761 dll | VT n20 246 | ALIGNAUTO AVIG Type: AVIGHOID: 1 | Log-Pwr 0/10 | ep 2.933 m 01:532 Mkr1 2.4 -4 -4 -4 -5 | s (1001 pts) |
| a lent Spectrum Analyzer RL RF S enter Freq 13.26 Ref Offset Ref 20.0 Ref 20.0 | Swept SA 10 Q AC 155000000 GHz 12.85 dB 10 dBm 43 2.457 3 Gf 3.282 3 Gf 4.757 5 Gf | Jrious NVI SEMS PNO: Fast FGain:Low #VBW #VBW #2 4686 dl Hz 44.761 dl | VT n20 246 | ALIGNAUTO AVIG Type: AVIGHOID: 1 | Log-Pwr 0/10 | ep 2.933 m 01:532 Mkr1 2.4 -4 -4 -4 -5 | s (1001 pts) |
| a Ilent Spectrum Analyzer RL RF E enter Freq 13.26 Ref Offset ddB/div Ref 20.0 00 1 10 1 10 1 10 1 10 1 10 1 | Swept SA 10 2 AC 15000000 GHz 12.85 dB 10 dBm 4 2 457 3 G 4.757 5 G 4.757 5 G 7.386 0 G | Jrious NVI SEMS PNO: Fast FGain:Low #VBW #VBW #2 4.686 dll Hz -4.686 dll Hz -54.761 dll Hz -54.761 dll | VT n20 246 | ALIGNAUTO AVIG Type: AVIGHOID: 1 | Log-Pwr 0/10 | ep 2.933 m 01:532 Mkr1 2.4 -4 -4 -4 -5 | s (1001 pts) |



APPENDIX 2-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

* * * * END OF THE REPORT * * * *













